

City Council Utility Committee

Meeting Agenda

Friday, August 18, 2017

COUNCIL CHAMBERS, CITY HALL, 2ND FLOOR

2:30-4:00 pm

- I. Call to Order
 - II. Roll Call
 - III. Approval of Agenda
 - IV. Approval of Minutes from July 21, 2017
 - V. Public Comments on Items Not on the Agenda
 - VI. Update – Water Resources
 - Water Supply Update
 - Windy Gap Firming Project Update (dates provided by NCWCD)
 - i. Water Rights Decree
 - VII. Water Rights Legal Services
 - Flyfisher
 - Harper Lake Open Space Rezoning
 - VIII. 2018 Utility Rates
 - Financials and Coordination with Finance Committee
 - Schedule Joint meeting with Finance Committee
 - Water Master Plan
 - IX. Upcoming Projects and Council Action
 - SCWTP Pump Station Construction – September/October
 - HBWTP Improvements – October
 - Louisville Pipeline Inspection – Fall
 - Louisville Pipeline Control Vault Construction – Fall/Winter
 - Louisville Lateral Piping Construction – Fall/Winter
 - X. Agenda Items and Date for Next Meeting
 - Discuss Work Plan
 - XI. WWTP Ribbon Cutting Friday September 15th – 8:30 am to 11:00 am
-

XII. Adjourn 4:00 pm

Attachments: 07-21-17 Draft Minutes

Water Supply Graph

Draft 2018 Utility Rates

Harper Lake Rezoning Memorandum

***City Council
Utility Committee
Draft - Meeting Minutes***

Friday, July 21, 2017

CITY COUNCIL CHAMBERS, CITY HALL, 2nd FLOOR

I. Call to Order – Jay Keany called the meeting to order at 8:32 am.

II. Roll Call was taken and the following members were present:

City Council: Jay Keany, Robert Muckle, Jeff Lipton, Susan Loo

Absent:

Staff Present: Heather Balser, Kurt Kowar, Kevin Watson, Cory Peterson, Terrell Phillips, Greg Venette, Alan Hill, Ashley Pollock, Graham Clark and Emily Kropf

Public: none

III. Approval of Agenda: Agenda approved as amended.

IV. Approval of the Minutes: The meeting minutes from March 31st were approved as written.

V. PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA:

None

VI. SCWTP and HBWTP Improvement Projects

Mr. Kowar provided an overview of the proposed SCWTP and HBWTP improvement project with additional detail as requested at the June 6th Council meeting.

Utility Committee explained concerns with further unknowns, pace that work is estimated to be completed and the longer term finance and reinvestment plan.

Mr. Phillips and Mr. Venette provided staff prospective and the challenges associated with the number of deferred maintenance projects.

Utility Committee provided direction for staff to proceed with the recommended 1-year plan to Finance Committee and Council with the understanding that the approval was given as a one-time catchup.

VII. WTP Lab Instruments/Software

Mr. Kowar presented briefly on an upcoming contract with Hach that will accomplish a planned and budgeted upgrade to the City's lab equipment and software.

VIII. Update – CIP Projects & Water Resources

Mr. Kowar summarized the Wastewater Plant project. The new process is operational and is performing beyond design requirements. Contingency is projected to be fully spent as a result of the failure of the digester blowers that were not anticipated to be replaced. The current estimate for the digester blower replacement is \$820,000.

Mr. Peterson indicated that the Windy Gap Project is progressing. The Windy Gap sub-committee approved a significant change order to the design at the July meeting. Louisville's portion is estimated at \$250,000. The current 2018 budget should accommodate this change but further modification could have impacts that would require additional funds.

IX. Water Rights Legal Services

Mr. Hill explained the ongoing issue with water lease requests. A more detailed discussion will be reserved for a future meeting.

X. Downtown tap Fee Follow-up

Mr. Kowar outlined that staff will be presenting to Council on August 1st on tap fees specifically in the downtown area. Staff feels that the tap fee process is solid and does not need modifications.

XI. Steel Ranch Lift Station

Mr. Kowar provided an overview of the recent Steel Ranch Lift Station failure. The cause is unknown at this time. The Lift Station was repaired and is operational. A neighborhood debrief will be scheduled in the near future.

XII. 2018 Utility Rates

Mr. Peterson highlighted the draft 2018 utility rate plan. Minor adjustments to Water and Sewer rates are still anticipated. Stormwater is expecting the largest change from the 2017 recommendation increasing to 7% from 3% as a result of grant funding that failed to materialize.

XIII. Undergrounding of Utilities

Discussion placed on hold for 3rd quarter meeting.

XIV. Windy Gap Tour

Windy Gap Tour scheduled for Friday August 4th from 7:30am to 6:30pm.

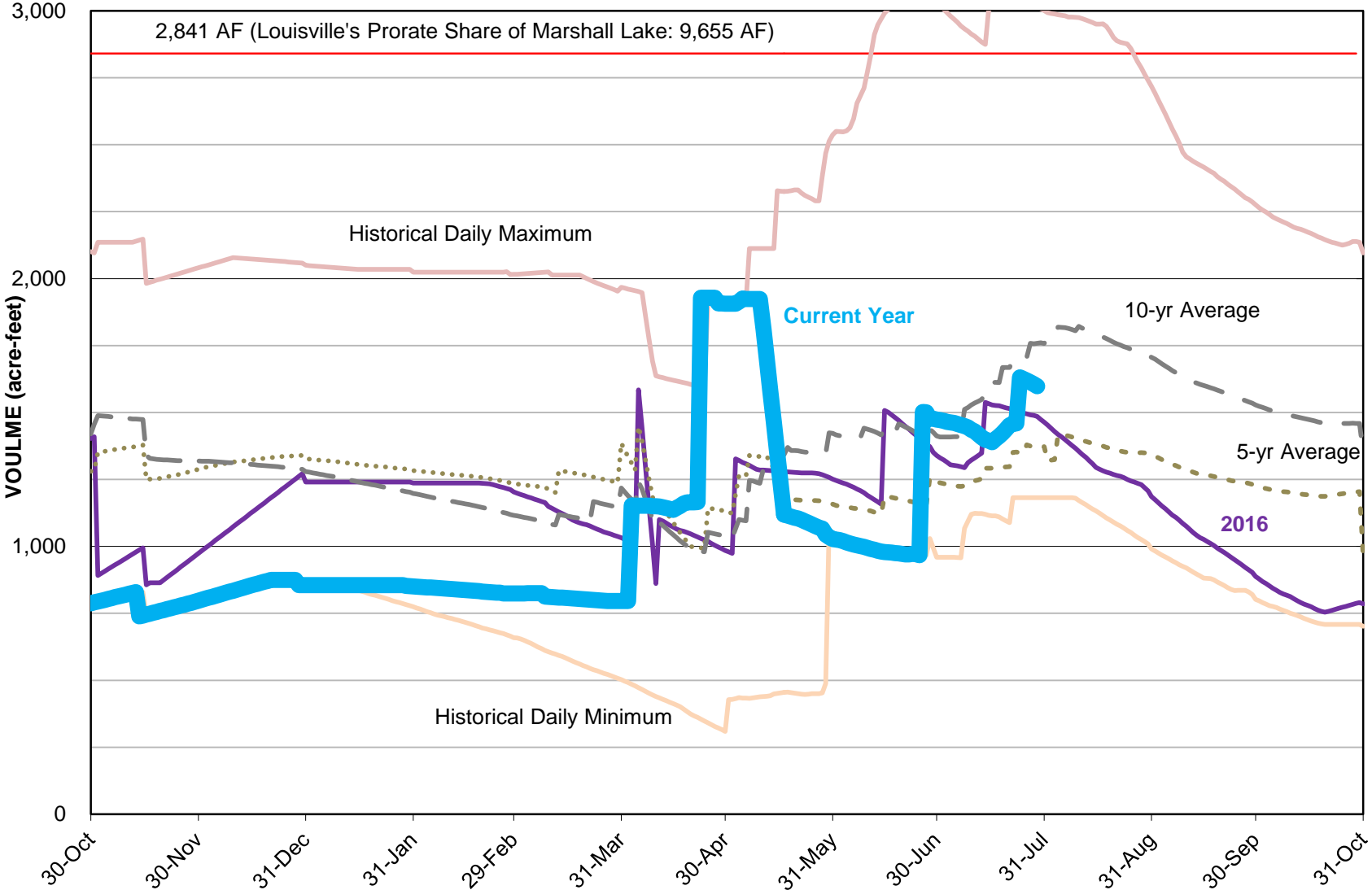
XV. WWTP Ribbon Cutting

WWTP Ribbon Cutting scheduled for Friday September 15th.

XVI. Adjourn

The meeting was adjourned at 10:00 am by Mr. Keany and seconded by Mr. Muckle.

LOUISVILLE STORAGE MARSHALL LAKE



Utility Committee Draft - 2018 Utility Financial Plan Update

August 18, 2017

Overview

Financial Plan

- ▶ Performance Metrics
- ▶ Alternatives
 - ▶ Just-In-Time
 - ▶ Smoothing - Recommended by Staff and Utility Committee

Financial Planning Performance Metrics

Debt Service Coverage (DSC):

Ratio of net revenues

(operating revenue less operating expense)

to annual debt service payment

- ▶ **Target DCS above required minimum Values**
 - ▶ Conservative approach to ensure legal DSC minimums are met even if revenue forecasts are not achieved
 - ▶ Maintain or achieve higher credit ratings

Debt Service Coverage

Required DSC Ratio

Colorado Water Resources and Power Development Authority	1.10
2013 Water and Wastewater Enterprise Revenue Bonds	1.15

Dual Target DSC Ratio

Fund	w/o Tap Fees	with Tap Fees ⁽¹⁾
Water	1.2	1.4
Wastewater	1.2	1.3
Storm	1.3	1.3 ⁽²⁾

(1) To reduce variability, tap fee revenue is from the prior year i.e. 2018 tap fee revenue was collected in 2017

(2) A tap fee for the stormwater utility has not been established, therefore the dual target is not used



Financial Planning Performance Metrics

Cash Reserves:

Target is the same for all 3 Utilities:
120 days cash or 33% of Total O&M

Working Capital Reserves Policy (section 2.4):

Policy is the same for all 3 Utilities:
25% of current operating expenses

Debt Issuance

Utility	Debt Service Payment (\$million)							
	2018	2019	2020	2021	2022	2023	2024	2025
Water	\$0.9M	\$0.9M	\$0.9M	\$0.9M	\$0.9M	\$0.9M	\$0.9M	\$0
Wastewater	\$1.3M	\$1.3M	\$1.3M	\$1.3M	\$1.3M	\$1.3M	\$1.3M	\$2.0M
Stormwater	\$0.3M	\$0.3M	\$0.3M	\$0.3M	\$0.3M	\$0.3M	\$0.3M	\$0.4M
Total	\$2.5M	\$2.5M	\$2.5M	\$2.5M	\$2.5M	\$2.5M	\$2.5M	\$2.4M

WATER

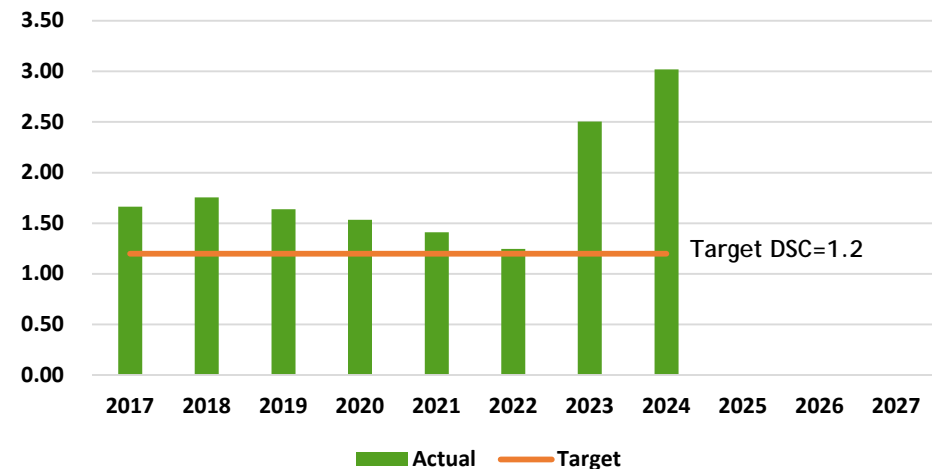
WATER

Financial Planning Alternatives

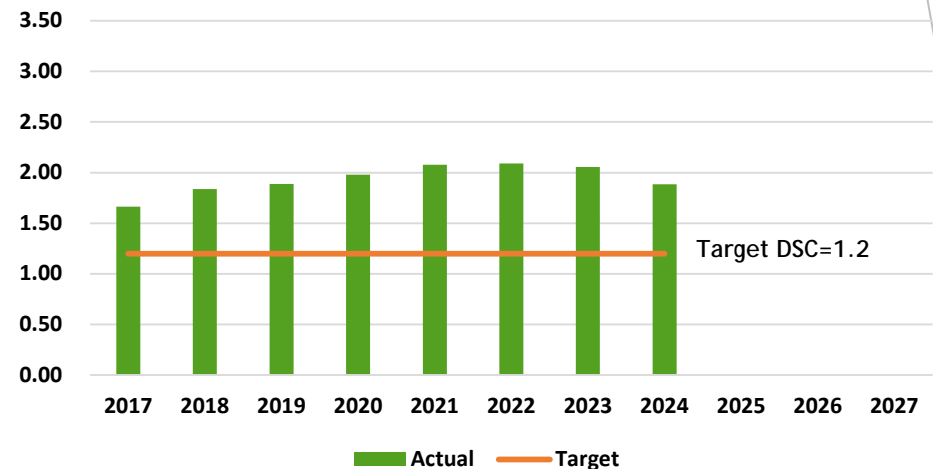
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
2017 Plan									
3%	3%	3%	3%	2%	4%	4%	4%	4%	-
"Just-In-Time" Revenue Increases									
0%	0%	0%	0%	1%	35%	0%	0%	0%	0%
"Smoothing" Revenue Increases									
2%	3%	3%	3%	2%	2%	2%	0%	0%	0%

WATER: Financial Plan Alternatives

Just-In-Time: DSC (0% for 2017)

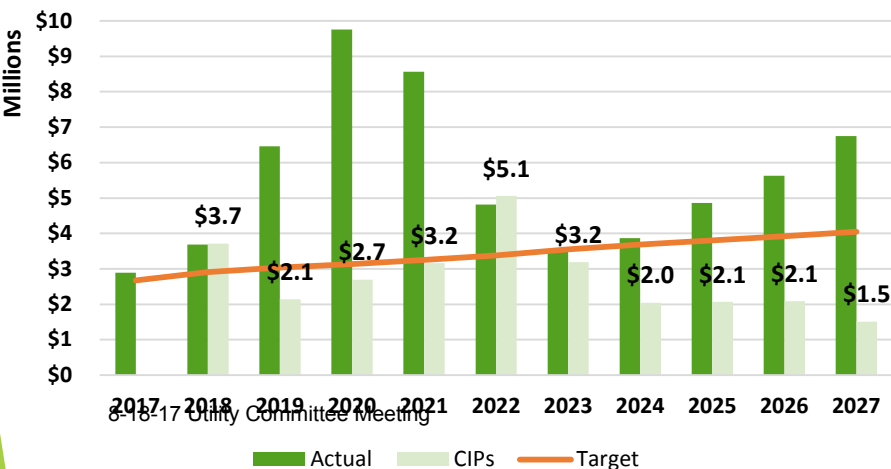


Smoothing: DSC (3% for 2017)

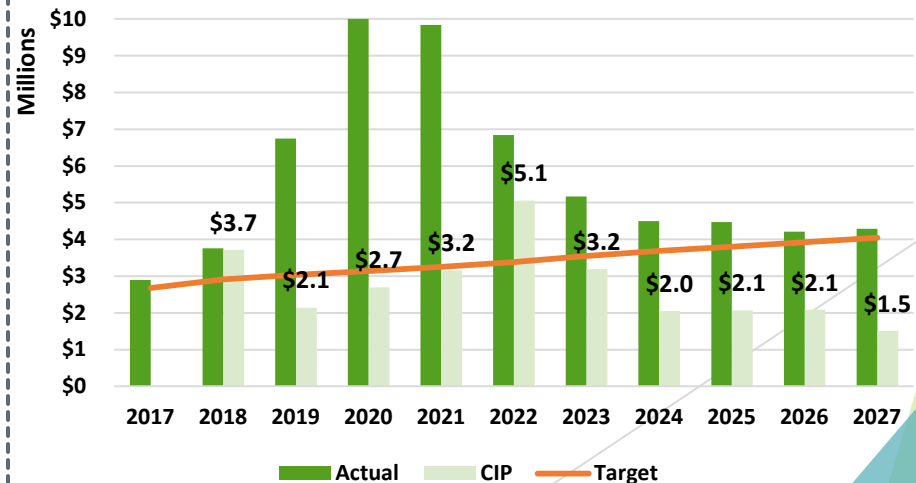


Recommended

Just-In-Time: Cash Reserves (0% for 2017)



Smoothing: Cash Reserves (3% for 2017)



WASTEWATER

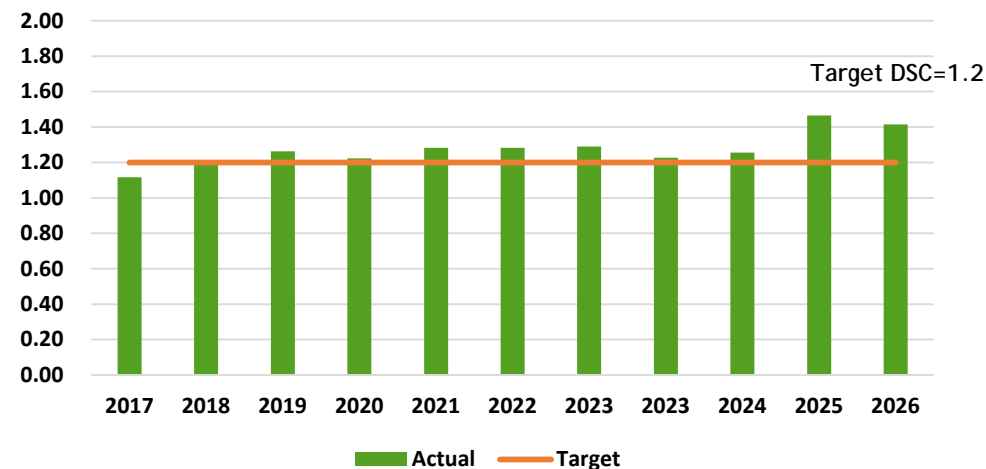
WASTEWATER

Financial Planning Alternatives

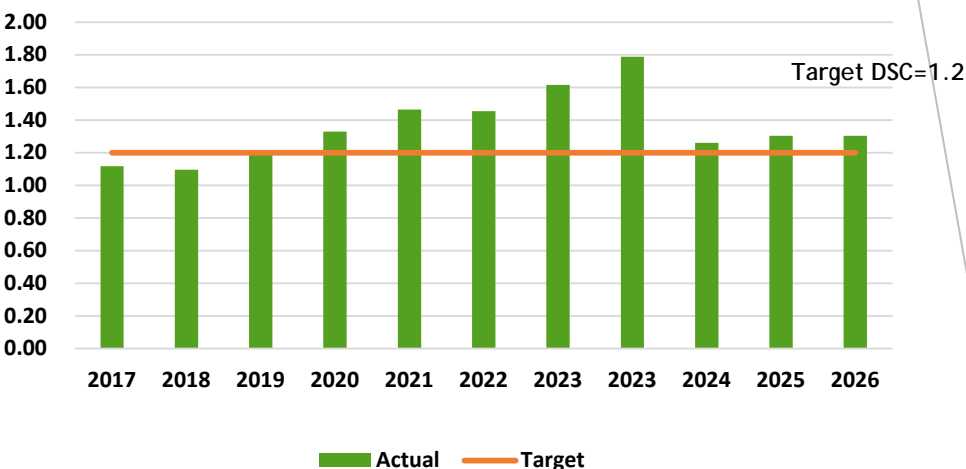
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
2017 Plan									
7%	6%	6%	6%	6%	6%	6%	6%	2%	-
"Just-In-Time" Revenue Increases									
12.5%	0%	0%	6%	8.5%	0%	1%	37%	0%	0%
"Smoothing" Revenue Increases									
6%	6%	6%	6.5%	7%	7%	7%	7%	2%	0%

WASTEWATER: Financial Plan Alternatives

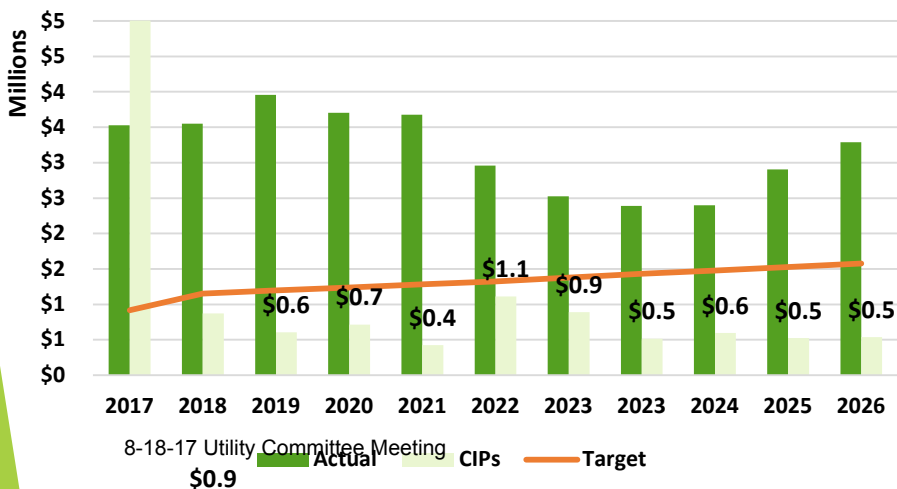
Just-In-Time: DSC (7% for 2017)



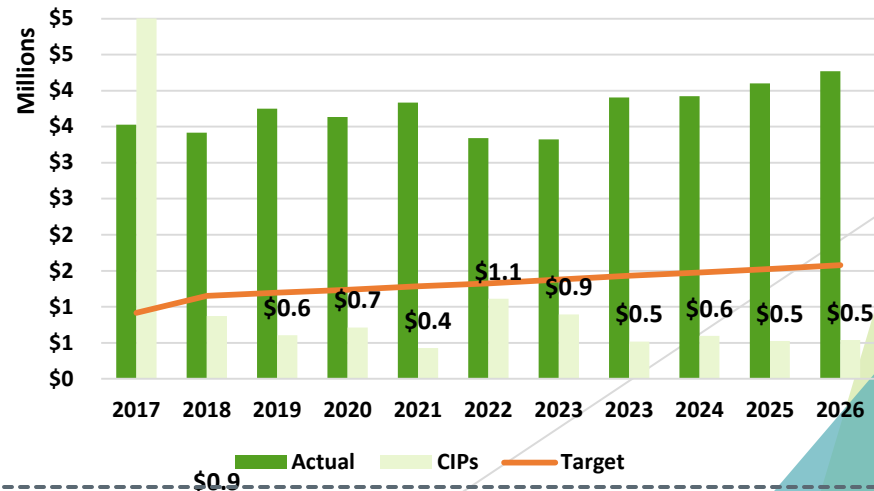
Smoothing: DSC (7% for 2017)



Just-In-Time: Cash Reserves (7% for 2017)



Smoothing: Cash Reserves (7% for 2017)



Recommended

STORMWATER

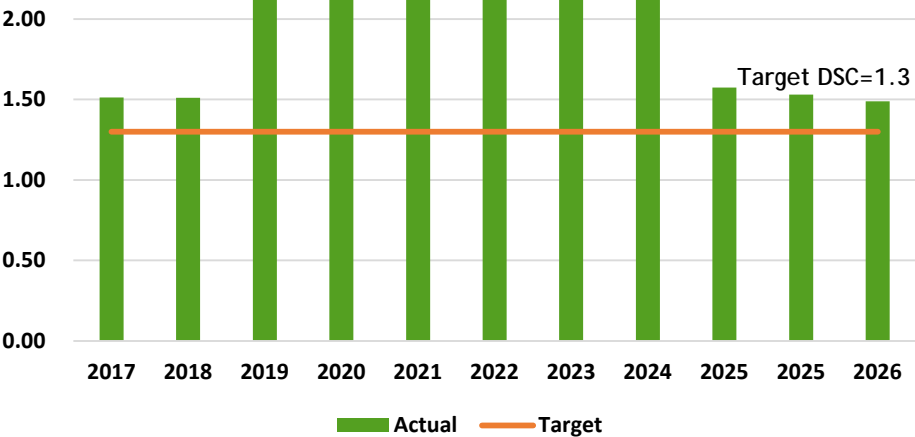
STORMWATER

Financial Planning Alternatives

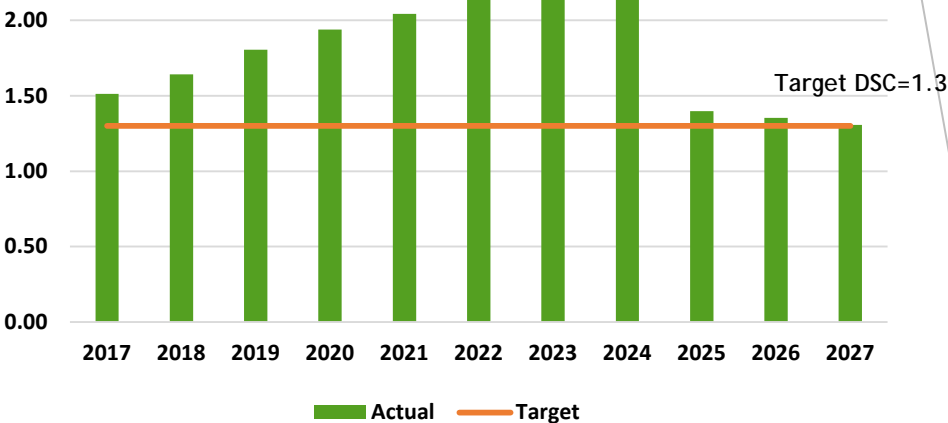
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
2017 Plan									
3%	3%	3%	3%	3%	3%	4%	4%	4%	-
"Just-In-Time" Revenue Increases									
0%	42%	0%	0%	0%	0%	0%	0%	0%	0%
"Smoothing" Revenue Increases									
7%	7%	4%	4%	4%	4%	0%	0%	0%	0%

STORMWATER: Financial Plan Alternatives

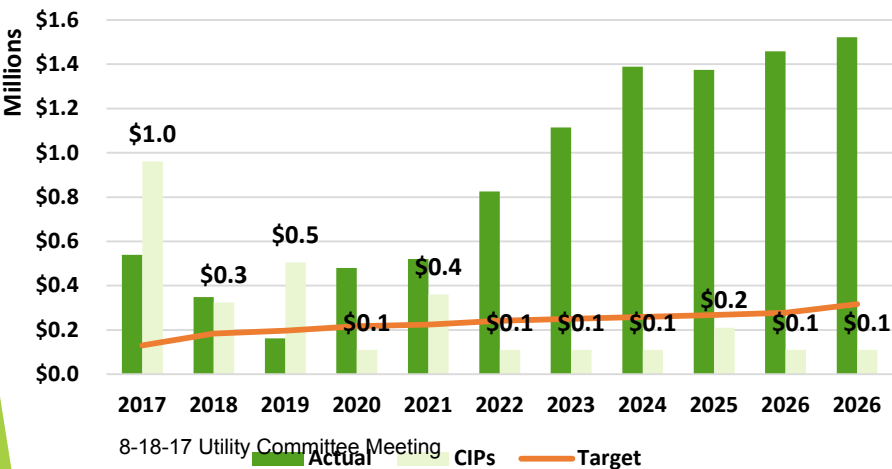
Just-In-Time: DSC (0% for 2017)



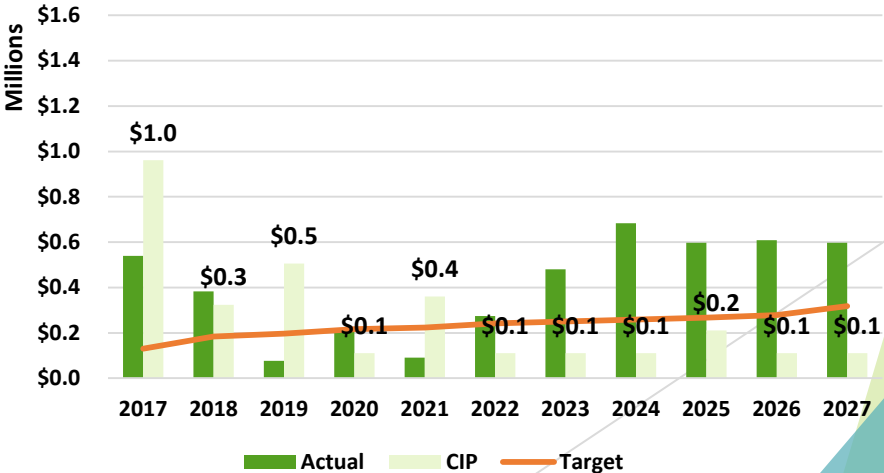
Smoothing: DSC (7% for 2018)



Just-In-Time: Cash Reserves (0% for 2017)



Smoothing: Cash Reserves (7% for 2018)



Recommended

Recommended Rate Increase:

	2018	2019	2020	2021	2022	2023
Alternative 2 - "Smoothing" Revenue Increases (All funds self-sufficient)						
Water	2% 3%	3% 3%	3% 3%	3% 3%	2% 2%	2%
Wastewater	6% 7%	6% 6%	6% 6%	6.5% 6%	7% 6%	7%
Stormwater	7% 4%	7% 3%	4% 3%	4% 3%	4% 3%	4%

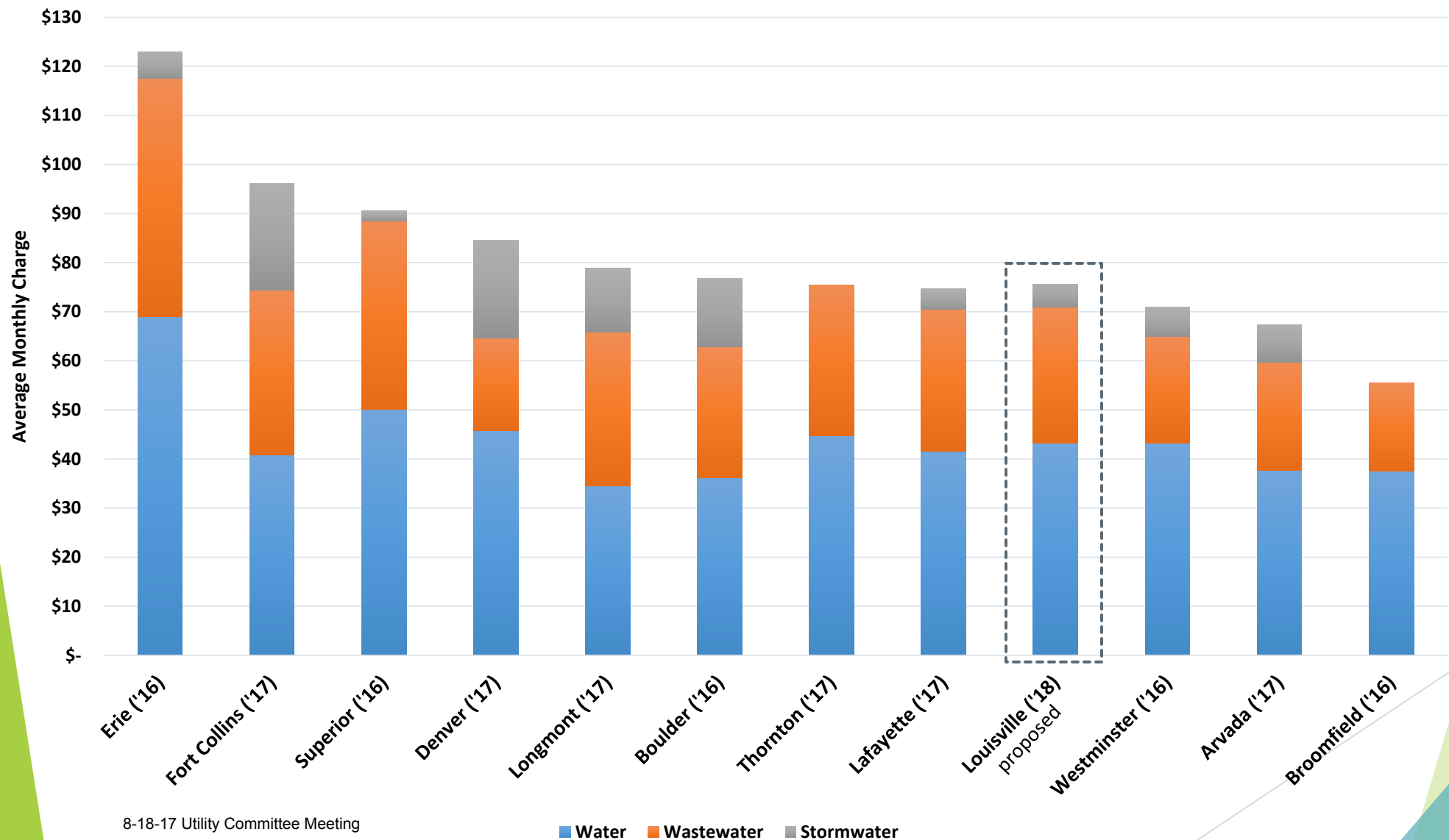
Prior Study 2018 - 2022 Projected Revenue Increases in strikethrough text

Average Residential Bill:

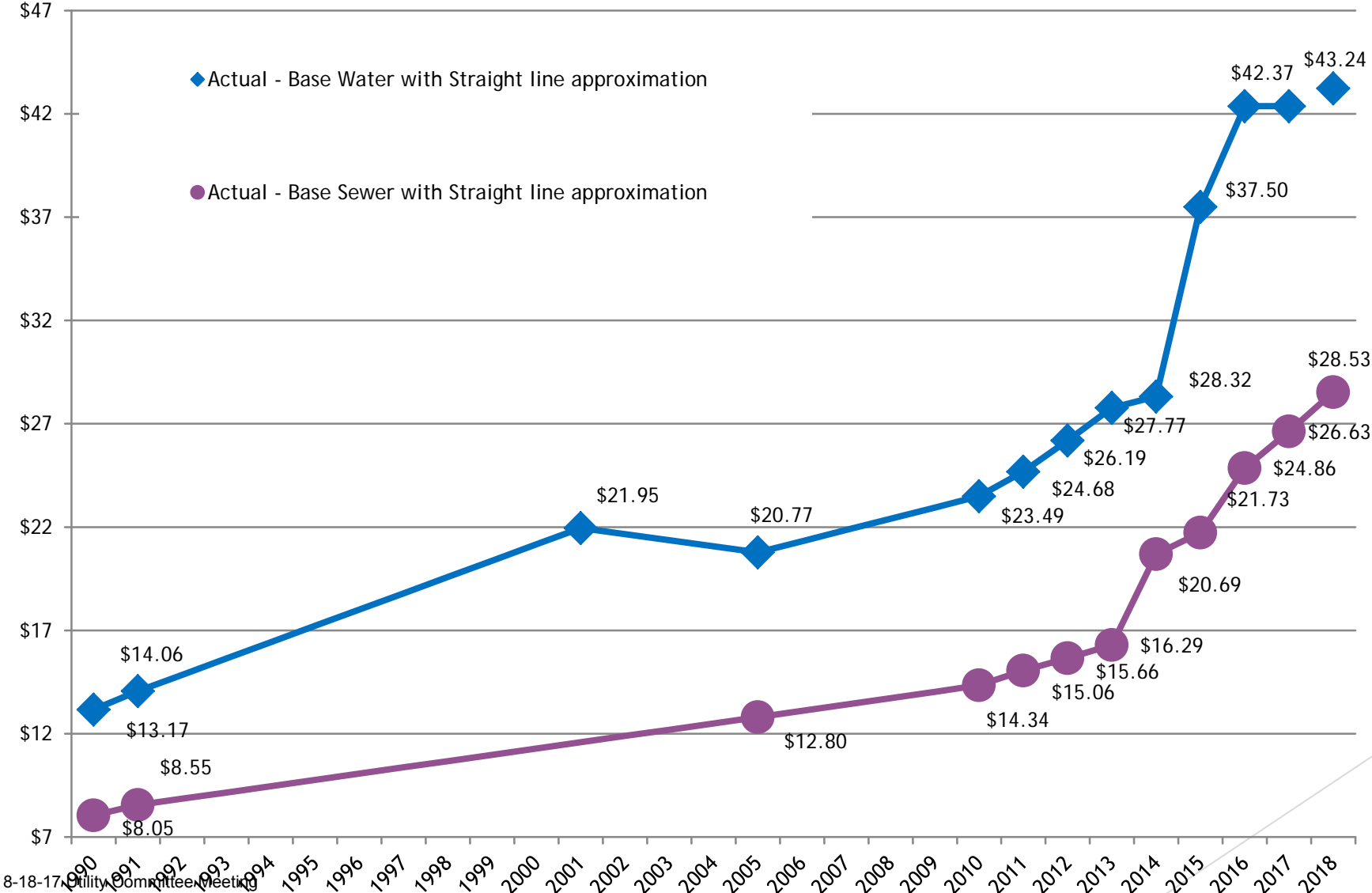
	Current 2017	Proposed 2018	Difference	Percent Increase
Water	\$42.37	\$43.24	\$0.87	2%
Wastewater	\$26.63	\$28.53	\$1.90	6%
Stormwater	\$4.40	\$4.71	\$0.31	7%
Total	\$73.40	\$76.48	\$3.08	4.2%

Based on average usage of approx. 9,220 gallons. Actual bills will be dependent on usage and will vary based on seasonal fluctuation.

Average Monthly Water, Wastewater & Storm Rates (Louisville Single Family Residential)



Historical Water and Sewer Rates



City of Louisville
2018 Financial Plan Update
Water Operating and Capital Fund Cash Flow

[To Water Master Control](#)
[To Wastewater Master Control](#)
[To Stormwater Master Control](#)
[To Combined Summary](#)

City of Louisville - Water Utility Forecast Operating Fund Cash Flow											
Description	Estimated 2017	Budget 2018	Forecast								
			2019	2020	2021	2022	2023	2024	2025	2026	2027
Beginning Operating Fund Balance	\$10,316,442	\$3,505,133	\$4,430,973	\$5,421,056	\$6,477,884	\$7,612,503	\$4,430,796	\$2,728,647	\$2,152,991	\$2,317,288	\$2,271,048
Revenue											
Rate Revenue	\$5,500,000	\$5,629,067	\$5,837,216	\$6,072,456	\$6,317,176	\$6,477,092	\$6,619,847	\$6,765,749	\$6,823,881	\$6,837,529	\$6,851,204
Unclassified Charges for Services	38,030	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000
Delinquent Charges	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Miscellaneous Revenues	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Operating Fund Interest Earnings	50,000	50,000	61,575	74,368	88,065	75,271	44,747	30,510	27,939	28,677	30,408
Sale of Fixed Asset	0	0	0	0	0	0	0	0	0	0	0
Solar Power Renewable Energy Credit	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Total Revenue	5,673,030	5,802,067	6,021,791	6,269,824	6,528,241	6,675,363	6,787,594	6,919,259	6,974,820	6,989,206	7,004,612
Revenue Requirements											
Operating Expenses	4,545,343	3,992,286	4,151,669	4,326,726	4,516,741	4,715,531	4,923,522	5,141,161	5,368,916	5,607,282	5,856,776
Debt Service - Existing	881,850	883,940	880,040	886,270	876,881	882,244	881,990	881,242	0	0	0
Debt Service - Proposed	0	0	0	0	0	0	0	0	0	0	0
Transfer Out to Capital Fund	7,057,147	0	0	0	0	4,259,295	2,684,231	1,472,511	1,441,607	1,428,163	824,593
Transfer Out to Debt Service Reserve	0	0	0	0	0	0	0	0	0	0	0
Total Revenue Requirement	12,484,339	4,876,226	5,031,709	5,212,996	5,393,621	9,857,070	8,489,743	7,494,914	6,810,524	7,035,445	6,681,369
Annual Surplus/(Deficit)	(6,811,309)	925,841	990,083	1,056,828	1,134,620	(3,181,708)	(1,702,149)	(575,655)	164,296	(46,239)	323,243
Ending Operating Fund Balance	3,505,133	4,430,973	5,421,056	6,477,884	7,612,503	4,430,796	2,728,647	2,152,991	2,317,288	2,271,048	2,594,291
Target Operating Reserve	1,494,359	1,312,532	1,364,932	1,422,485	1,484,956	1,550,312	1,618,692	1,690,245	1,765,123	1,843,490	1,925,515
Ending Balance Excess / (Shortfall)	1,494,359	1,312,532	1,364,932	1,422,485	1,484,956	1,550,312	1,618,692	1,690,245	1,765,123	1,843,490	1,925,515
DSCR without Tap Fees (Target =1.2)	1.28	2.05	2.13	2.19	2.29	2.22	2.11	2.02	0.00	0.00	0.00
Projected Revenue Increase	0.0%	2.0%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%	0.0%	0.0%

City of Louisville - Water Utility Forecast Capital Fund Cash Flow											
Description	Estimated 2017	Budget 2018	Forecast								
			2019	2020	2021	2022	2023	2024	2025	2026	2027
Beginning Fund Balance	\$0	\$1,395,180	\$2,029,280	\$5,433,140	\$4,404,658	\$2,412,968	\$1,818,611	\$1,917,911	\$1,979,351	\$2,017,371	\$2,055,291
Sources of Funds											
Tap Fee Revenue	3,833,578	4,349,697	5,497,220	1,576,032	1,098,700	84,900	463,716	465,571	467,433	469,303	471,180
Transfer In From Operating Fund	7,057,147	0	0	0	0	4,259,295	2,684,231	1,472,511	1,441,607	1,428,163	824,593
Bond/Loan Proceeds	0	0	0	0	0	0	0	0	0	0	0
Capital Fund Interest Earnings	0	21,403	46,640	61,486	42,610	26,447	23,353	24,358	24,980	25,454	25,927
Total Sources of Funds	10,890,725	4,371,100	5,543,860	1,637,518	1,141,310	4,370,643	3,171,300	1,962,440	1,934,020	1,922,920	1,321,700
Uses of Funds											
CIP	9,495,545	3,737,000	2,140,000	2,666,000	3,133,000	4,965,000	3,072,000	1,901,000	1,896,000	1,885,000	1,284,000
Total Uses of Funds	9,495,545	3,737,000	2,140,000	2,666,000	3,133,000	4,965,000	3,072,000	1,901,000	1,896,000	1,885,000	1,284,000
Annual Surplus/(Deficit)	1,395,180	634,100	3,403,860	(1,028,482)	(1,991,690)	(594,357)	99,300	61,440	38,020	37,920	37,700
Ending Fund Balance	1,395,180	2,029,280	5,433,140	4,404,658	2,412,968	1,818,611	1,917,911	1,979,351	2,017,371	2,055,291	2,092,991
Target Fund Balance (2% of Fixed Assets)	\$1,395,180	\$1,585,091	\$1,659,831	\$1,702,631	\$1,755,951	\$1,818,611	\$1,917,911	\$1,979,351	\$2,017,371	\$2,055,291	\$2,092,991
Ending Balance Excess/(Shortfall)	\$0	\$444,189	\$3,773,309	\$2,702,027	\$657,017	\$0	\$0	\$0	\$0	\$0	\$0
Projected Tap Fee Increase	0.0%	17.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

**City of Louisville
2018 Financial Plan Update
Water CIP Forecast**

[To Water Master Control](#)
[To Wastewater Master Control](#)
[To Stormwater Master Control](#)
[To Combined Summary](#)

City of Louisville - Water Utility Forecast CIP without Inflation											
Project	Estimated 2017	Budget 2018	Forecast								
			2019	2020	2021	2022	2023	2024	2025	2026	2027
NCWCD-Windy Gap Firming Project	\$350,624	\$905,000	\$905,000	\$905,000	\$905,000	\$905,000	\$905,000	\$905,000	\$905,000	\$905,000	\$905,000
Water Line Replacement	230,000	245,000	255,000	260,000	277,000	270,000	275,000	280,000	285,000	290,000	290,000
Water Line Replacement - City Streets	2,400,000	298,000	67,000	58,000							
Water Rights Acquisition					524,000	500,000	500,000	500,000	500,000	500,000	
Sid Copeland WTP Pump Station Improvements	2,800,000										
Floc/Sed Basin Covers											
SWSP Transmission Capacity			125,000	1,260,000							
Replace Tube Settlers	589,000	786,000									
McKay Reservoir Pipeline					1,050,000						
Lateral Ditch Piping	205,000	625,000									
Sid Copeland WTP Contact Tank Improvements											
Marshall Lake Sediment Control						100,000	500,000				
Water Plants Disinfection Evaluation	102,500	472,000									
Scada Master Plan	250,000										
Pipeline modification to Fill Marshall Reservoir					41,000	500,000					
HBWTP High Service Pump Replacement/Rehab						250,000					
Pipeline Condition Assessment	250,000										
SCWTP Drying Bed Rehab											
SBR Ditch Lining		84,000	83,000	83,000	83,000						
Security Upgrades	100,000										
Solar Panel Equipment Lease Buyout											
Lower Recycle Pond Lining and Maintenance SCWTP		52,000	83,000								
Filter Media Replacement HBWTP	155,000						250,000				
Facilities Painting	200,000										
Water Tank interior Structure Maintenance		105,000									
HBWTP Flash Mixer Replacement with VFD's	87,000										
Lower Pond Pump Station and VFD rehab					78,000						
Instrumentation upgrades for both facilities	150,000	0	50,000					35,000	35,000		
Harper Lake Stop Logs	35,000										
Vehicle & Equipment Replacement	31,345	32,000						30,000			
SCWTP Building Upgrades			524,000								
Enterprise Resource Planning (25%)											
PRV Replacement	40,000										
Equipment Purchase for Solids Handling HBWTP - SCWTP						25,000					
Lucity Asset Management Software (25%)	28,876	25,000									
SCWTP Intake structure Evaluation						18,000					
Bulk Water Meter/Backflow Replacement	10,000										
HBWTP Recycle pump station and VFD Rehab							15,000				
Groundwater PS Controls Upgrade											
Howard Diversion Completion/Upkeep	69,500										
Recycle Pump Improvements - SCWTP											
Environmental Site Assessment - 1600 Empire Road (25%)											
Utility Rate Update Study											
Caustic Tank Upsize	25,000										
HBWTP HVAC Upgrades	80,000										
SCWTP Flash mixer impeller replacement	87,000										
Fire Hydrant Painting	18,000	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500
Centennial / McCaslin High Zone Water Loop	53,700										
System Water Loss Audit		42,000									
Watershed Protection Plan		52,500									
WQ real time system monitoring							360,000				
Water System Tie-In with Superior											
Eldorado Intake - Flood Reconstruction											
Louisville Pipeline Flow Control	250,000										
Meter replacement						2,000,000					
HBWTP Upgrades	405,000										
SCWTP Upgrades	493,000										
Updated Total CIP Before Inflation Adjustment	\$9,495,545	\$3,736,000	\$2,104,500	\$2,578,500	\$2,970,500	\$4,580,500	\$2,817,500	\$1,762,500	\$1,737,500	\$1,707,500	\$1,207,500

City of Louisville
2018 Financial Plan Update
Water CIP Forecast

[To Water Master Control](#)
[To Wastewater Master Control](#)
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City of Louisville - Water Utility Forecast CIP with Inflation											
Project	Estimated 2017	Budget 2018	Forecast								
			2019	2020	2021	2022	2023	2024	2025	2026	2027
NCWCD-Windy Gap Firming Project	\$350,624	\$905,000	\$905,000	\$905,000	\$905,000	\$905,000	\$905,000	\$905,000	\$905,000	\$905,000	\$905,000
Water Line Replacement	230,000	\$245,000	\$262,000	\$274,000	\$299,000	\$299,000	\$312,000	\$325,000	\$339,000	\$354,000	\$363,000
Water Line Replacement - City Streets	2,400,000	\$298,000	\$69,000	\$61,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Rights Acquisition	0	\$0	\$0	\$0	\$565,000	\$552,000	\$566,000	\$580,000	\$595,000	\$610,000	\$0
Sid Copeland WTP Pump Station Improvements	2,800,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Floc/Sed Basin Covers	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SWSP Transmission Capacity	0	\$0	\$129,000	\$1,324,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Replace Tube Settlers	589,000	\$786,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
McKay Reservoir Pipeline	0	\$0	\$0	\$0	\$1,131,000	\$0	\$0	\$0	\$0	\$0	\$0
Lateral Ditch Piping	205,000	\$625,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sid Copeland WTP Contact Tank Improvements	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Marshall Lake Sediment Control	0	\$0	\$0	\$0	\$0	\$111,000	\$566,000	\$0	\$0	\$0	\$0
Water Plants Disinfection Evaluation	102,500	\$472,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Scada Master Plan	250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pipeline modification to Fill Marshall Reservoir	0	\$0	\$0	\$0	\$45,000	\$552,000	\$0	\$0	\$0	\$0	\$0
HBWTP High Service Pump Replacement/Rehab	0	\$0	\$0	\$0	\$0	\$276,000	\$0	\$0	\$0	\$0	\$0
Pipeline Condition Assessment	250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SCWTP Drying Bed Rehab	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SBR Ditch Lining	0	\$84,000	\$86,000	\$88,000	\$90,000	\$0	\$0	\$0	\$0	\$0	\$0
Security Upgrades	100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Solar Panel Equipment Lease Buyout	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lower Recycle Pond Lining and Maintenance SCWTP	0	\$52,000	\$86,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Filter Media Replacement HBWTP	155,000	\$0	\$0	\$0	\$0	\$0	\$283,000	\$0	\$0	\$0	\$0
Facilities Painting	200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Tank interior Structure Maintenance	0	\$105,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
HBWTP Flash Mixer Replacement with VFD's	87,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lower Pond Pump Station and VFD rehab	0	\$0	\$0	\$0	\$84,000	\$0	\$0	\$0	\$0	\$0	\$0
Instrumentation upgrades for both facilities	150,000	\$0	\$52,000	\$0	\$0	\$0	\$0	\$41,000	\$42,000	\$0	\$0
Harper Lake Stop Logs	35,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Vehicle & Equipment Replacement	31,345	\$32,000	\$0	\$0	\$0	\$0	\$0	\$35,000	\$0	\$0	\$0
SCWTP Building Upgrades	0	\$0	\$538,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Enterprise Resource Planning (25%)	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PRV Replacement	40,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment Purchase for Solids Handling HBWTP - SCWTP	0	\$0	\$0	\$0	\$0	\$28,000	\$0	\$0	\$0	\$0	\$0
Lucity Asset Management Software (25%)	28,876	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SCWTP Intake structure Evaluation	0	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0
Bulk Water Meter/Backflow Replacement	10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
HBWTP Recycle pump station and VFD Rehab	0	\$0	\$0	\$0	\$0	\$0	\$17,000	\$0	\$0	\$0	\$0
Groundwater PS Controls Upgrade	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Howard Diversion Completion/Upkeep	69,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Recycle Pump Improvements - SCWTP	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Environmental Site Assessment - 1600 Empire Road (25%)	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Utility Rate Update Study	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Caustic Tank Upsize	25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
HBWTP HVAC Upgrades	80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SCWTP Flash mixer impeller replacement	87,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fire Hydrant Painting	18,000	\$13,000	\$13,000	\$14,000	\$14,000	\$14,000	\$15,000	\$15,000	\$15,000	\$16,000	\$16,000
Centennial / McCaslin High Zone Water Loop	53,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
System Water Loss Audit	0	\$42,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Watershed Protection Plan	0	\$53,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WQ real time system monitoring	0	\$0	\$0	\$0	\$0	\$0	\$408,000	\$0	\$0	\$0	\$0
Water System Tie-In with Superior	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Eldorado Intake - Flood Reconstruction	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Louisville Pipeline Flow Control	250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Meter replacement	0	\$0	\$0	\$0	\$0	\$2,208,000	\$0	\$0	\$0	\$0	\$0
HBWTP Upgrades	405,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SCWTP Upgrades	493,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total CIP After Inflation Adjustment	\$9,495,545	\$3,737,000	\$2,140,000	\$2,666,000	\$3,133,000	\$4,965,000	\$3,072,000	\$1,901,000	\$1,896,000	\$1,885,000	\$1,284,000
Total Inflation Adjustment	\$0	\$1,000	\$35,500	\$87,500	\$162,500	\$384,500	\$254,500	\$138,500	\$158,500	\$177,500	\$76,500

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City of Louisville - Water Utility												
Forecast Operations and Maintenance Expenses												
Cost Description	Category	Estimated	Budget	Forecast								
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
1	2	3	4	5	6	7	8	9	10	11	12	
Total Central Charges (110)												
Regular Salaries	Labor	\$285,498	\$270,874	\$281,709	\$292,977	\$304,696	\$316,884	\$329,560	\$342,742	\$356,452	\$370,710	\$385,538
Temporary Salaries	Labor	0	0	0	0	0	0	0	0	0	0	0
Overtime Pay	Labor	1,424	1,444	1,502	1,562	1,624	1,689	1,757	1,827	1,900	1,976	2,055
FICA Expense	FICA	19,844	18,774	19,525	20,306	21,118	21,963	22,841	23,755	24,705	25,694	26,721
Retirement Contribution	Retirement	18,408	17,599	18,303	19,035	19,796	20,588	21,412	22,268	23,159	24,085	25,049
Workers Compensation	WorkComp	1,981	1,917	1,955	1,994	2,034	2,075	2,117	2,159	2,202	2,246	2,291
Health Insurance	Benefits	31,453	32,590	34,708	37,138	39,738	42,519	45,496	48,680	52,088	55,734	59,635
Health Insurance - Dental	Benefits	2,635	2,600	2,769	2,963	3,170	3,392	3,630	3,884	4,156	4,446	4,758
Health Insurance - Vision	Benefits	521	492	524	561	600	642	687	735	786	841	900
Life, AD&D & LTD Insurance	Benefits	2,510	2,397	2,553	2,732	2,923	3,127	3,346	3,580	3,831	4,099	4,386
Employee Assistance Plan	Benefits	84	78	83	89	95	102	109	117	125	133	143
Office Supplies	OPS	50	50	52	54	57	60	63	66	69	73	76
Printing	OPS	40	45	47	49	51	54	57	59	62	66	69
Travel	OPS	10	10	10	11	11	12	13	13	14	15	15
Non-Capital Furniture/Equipment/Tools	Constant	45	45	45	45	45	45	45	45	45	45	45
Professional Services - Audit	ProServices	17,535	19,300	19,879	20,475	21,090	21,722	22,374	23,045	23,737	24,449	25,182
Professional Services - Investment Fees	ProServices	5,700	6,300	6,489	6,684	6,884	7,091	7,303	7,523	7,748	7,981	8,220
Professional Services - Banking Fees	ProServices	6,600	7,200	7,416	7,638	7,868	8,104	8,347	8,597	8,855	9,121	9,394
Professional Services - microfilming	ProServices	0	0	0	0	0	0	0	0	0	0	0
Legal Services - General	Legal	2,500	2,500	2,588	2,678	2,772	2,869	2,969	3,073	3,181	3,292	3,407
Communications - Cellular Telephone	Comm	700	700	700	700	700	700	700	700	700	700	700
Communications - T1 Line	Comm	95	105	105	105	105	105	105	105	105	105	105
Public Outreach	Constant	200	200	200	200	200	200	200	200	200	200	200
Louisville Recycling/Con Board	OPS	0	70	73	76	80	84	88	92	97	102	107
Insurance	Insurance	90,000	99,000	103,950	110,187	116,798	123,806	131,234	139,109	147,455	156,302	165,681
Insurance Vehicles	Insurance	0	0	0	0	0	0	0	0	0	0	0
Insurance Deductibles	Insurance	0	0	0	0	0	0	0	0	0	0	0
Business and Auto Allowance	OPS	2,940	2,940	3,058	3,195	3,355	3,523	3,699	3,884	4,078	4,282	4,496
Dues/Subscriptions/Books	OPS	45	45	47	49	51	54	57	59	62	66	69
Refunds	OPS	3,500	3,500	3,640	3,804	3,994	4,194	4,403	4,624	4,855	5,097	5,352
Refunds-1 mill levy	OPS	0	0	0	0	0	0	0	0	0	0	0
Depreciation Expense	Constant	0	0	0	0	0	0	0	0	0	0	0
Computer Replacement	Constant	585	585	585	585	585	585	585	585	585	585	585
Cost Relating to Change in Accounting Estimate	Constant	0	0	0	0	0	0	0	0	0	0	0
Loss on Written off Assets	Constant	0	0	0	0	0	0	0	0	0	0	0
Total Central Charges		494,903	491,360	512,514	535,892	560,442	586,189	613,195	641,527	671,252	702,445	735,181
Total Utility Billing (210)												
Regular Salaries	Labor	34,326	35,416	36,833	38,306	39,838	41,432	43,089	44,813	46,605	48,469	50,408
Temporary Salaries	Labor	0	0	0	0	0	0	0	0	0	0	0
Overtime Pay	Labor	2,732	2,732	2,841	2,955	3,073	3,196	3,324	3,457	3,595	3,739	3,888
FICA Expense	FICA	2,696	2,769	2,880	2,995	3,115	3,239	3,369	3,504	3,644	3,790	3,941
Retirement Contribution	Retirement	2,038	2,038	2,120	2,204	2,292	2,384	2,480	2,579	2,682	2,789	2,901
Health Insurance	Benefits	6,635	6,835	7,279	7,789	8,334	8,917	9,542	10,210	10,924	11,689	12,507
Health Insurance - Dental	Benefits	501	526	560	599	641	686	734	786	841	900	963
Health Insurance - Vision	Benefits	100	100	107	114	122	130	140	149	160	171	183
Life, AD&D & LTD Insurance	Benefits	351	362	386	413	441	472	505	541	579	619	662
Employee Assistance Plan	Benefits	18	18	19	21	22	23	25	27	29	31	33
Workers Compensation	WorkComp	1,032	1,062	1,083	1,105	1,127	1,150	1,173	1,196	1,220	1,244	1,269
Unemployment Compensation	Labor	0	0	0	0	0	0	0	0	0	0	0
Office Supplies	OPS	200	200	208	217	228	240	252	264	277	291	306
Non-Capital Furniture/Equipment/Tools	Inflation	0	0	0	0	0	0	0	0	0	0	0
Non-Capital Computer Hardware	Inflation	0	0	0	0	0	0	0	0	0	0	0
Non-Capital Computer Software	Inflation	0	0	0	0	0	0	0	0	0	0	0
Professional Services - Bank Charges	ProServices	30,000	33,000	33,990	35,010	36,060	37,142	38,256	39,404	40,586	41,803	43,058
Professional Services - Other	ProServices	37,500	39,000	40,170	41,375	42,616	43,895	45,212	46,568	47,965	49,404	50,886
Postage	OPS	16,100	16,900	17,576	18,367	19,285	20,250	21,262	22,325	23,441	24,613	25,844
Parts/Repairs/Maintenance - Equipment	Repairs	1,000	1,000	1,040	1,087	1,141	1,198	1,258	1,321	1,387	1,456	1,529
Parts/Repairs/Maintenance - Software	Repairs	8,600	9,030	9,391	9,814	10,304	10,820	11,361	11,929	12,525	13,151	13,809
Uniforms and Clothing	Uniform	0	0	0	0	0	0	0	0	0	0	0
Printing	OPS	7,500	7,500	7,800	8,151	8,559	8,986	9,436	9,908	10,403	10,923	11,469
Travel	Inflation	0	0	0	0	0	0	0	0	0	0	0
Dues/Subscriptions/Books	Inflation	0	0	0	0	0	0	0	0	0	0	0
Machinery and Equipment-General	Inflation	0	0	0	0	0	0	0	0	0	0	0
Computer Hardware	Inflation	0	0	0	0	0	0	0	0	0	0	0
Total Utility Billing		151,529	158,488	164,282	170,521	177,200	184,161	191,416	198,978	206,863	215,084	223,657
Total Water Engineering (422)												
Regular Salaries	Labor	52,810	53,398	55,534	57,755	60,065	62,468	64,967	67,566	70,268	73,079	76,002
Temporary Salaries	Labor	0	0	0	0	0	0	0	0	0	0	0
Overtime Pay	Labor	0	150	156	162	169	175	182	190	197	205	213
FICA Expense	FICA	3,879	3,933	4,090	4,254	4,424	4,601	4,785	4,976	5,176	5,383	5,598
Retirement Contribution	Retirement	2,905	2,945	3,063	3,185	3,313	3,445	3,583	3,726	3,875	4,030	4,192
Health Insurance	Benefits	4,745	5,246	5,587	5,978	6,397	6,844	7,323	7,836	8,385	8,971	9,599
Health Insurance - Dental	Benefits	442	466	496	531	568	608	651	696	745	797	853
Health Insurance - Vision	Benefits	94	95	101	108	116	124	133	142	152	162	174
Life, AD&D & LTD Insurance	Benefits	513	518	552	590	632	676	723	774	828	886	948
Employee Assistance Plan	Benefits	19	19	20	22	23	25	27	28	30	32	35
Workers Compensation	WorkComp	406	413	421	430	438	447	456	465	474	484	494
Unemployment Compensation	Labor	0	0	0	0	0	0	0	0	0	0	0
Office Supplies	OPS	420	440	458	478	502	527	554	581	610	641	673
Computer Supplies	OPS	20	20	21	22	23	24	25	26	28	29	31
Non-Capital Computer Software	OPS	100	100	104	109	114	120	126	132	139	146	153
Operation Supplies - Safety	OPS	60	60	62	65	68	72	75	79	83	87	92
Non-Capital Furniture/Equipment/Tools	OPS	940	980	1,019	1,065	1,118	1,174	1,233	1,295	1,359	1,427	1,499
Miscellaneous Supplies	OPS	40	40	42	43	46	48	50	53	55	58	61
Uniforms and Clothing	Uniform	0	0	0	0	0	0	0	0	0	0	0
Auto Expense-Parts & Repairs	OPS	220	240	250	261	274	288	302	317	333	350	367
Auto Expense-Tires	OPS	0	0	0	0	0	0	0	0	0	0	0
Gas & Oil	OPS	420	440	458	478	502	527	554	581	610	641	673
Printing	OPS	320	340	354	370	388	407	428	449	472	495	520
Travel	OPS	20	20	21	22	23	24	25	26	28	29	31
Business and Auto Allowance	OPS	0	0	0	0	0	0	0	0	0	0	0
Dues/Subscriptions/Books	OPS	260	280	291	304	320	335	352	370	388	408	428
Communication Svcs-Cell Phone	OPS	0	0	0	0	0	0	0	0	0	0	0
Prof Serv-Consulting	OPS	25,220	25,240	26,250	27,431	28,802	30,242	31,755	33,342	35,009	36,760	38,598
Parts/Repairs/Maint-Copiers	Repairs	240	260	270	283	297	312	327	343	361	379	398
Parts/Repairs/Maint-Software	Repairs	1,160	1,220	1,269	1,326	1,392	1,462	1,535	1,612	1,692	1,777	1,866
Total Water Engineering		95,253	96,863	100,888	105,272	110,014	114,976	120,170	125,607	131,298	137,257	143,495

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City of Louisville - Water Utility												
Forecast Operations and Maintenance Expenses												
Cost Description	Category	Estimated	Budget	Forecast								
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Total Water Plant Operations (461)												
Regular Salaries	Labor	573,982	588,565	612,108	636,592	662,056	688,538	716,079	744,722	774,511	805,492	837,712
Temporary Salaries	Labor	51,146	52,682	54,789	56,981	59,260	61,630	64,096	66,660	69,326	72,099	74,983
Overtime Pay	Labor	22,075	20,185	20,992	21,832	22,705	23,614	24,558	25,540	26,562	27,625	28,730
FICA Expense	FICA	47,929	48,877	50,832	52,865	54,980	57,179	59,466	61,845	64,319	66,892	69,567
Retirement Contribution	Retirement	32,784	33,481	34,820	36,213	37,662	39,168	40,735	42,364	44,059	45,821	47,654
Health Insurance	Benefits	70,135	77,153	82,168	87,920	94,074	100,659	107,705	115,245	123,312	131,944	141,180
Health Insurance - Dental	Benefits	6,131	6,438	6,856	7,336	7,850	8,399	8,987	9,617	10,290	11,010	11,781
Health Insurance - Vision	Benefits	1,336	1,336	1,423	1,522	1,629	1,743	1,865	1,996	2,135	2,285	2,445
Life, AD&D & LTD Insurance	Benefits	5,780	5,924	6,309	6,751	7,223	7,729	8,270	8,849	9,468	10,131	10,840
Employee Assistance Plan	Benefits	269	269	286	307	328	351	376	402	430	460	492
Workers Compensation	WorkComp	11,262	11,554	11,785	12,021	12,261	12,506	12,757	13,012	13,272	13,537	13,808
Unemployment Compensation	Labor	0	0	0	0	0	0	0	0	0	0	0
Office Supplies	OPS	1,550	1,650	1,716	1,793	1,883	1,977	2,076	2,180	2,289	2,403	2,523
Non-Capital Furniture/Equipment/Tools	OPS	3,000	3,000	3,120	3,260	3,423	3,595	3,774	3,963	4,161	4,369	4,588
Non-Capital Computer Hardware	OPS	1,090	1,200	1,248	1,304	1,369	1,438	1,510	1,585	1,664	1,748	1,835
Computer Supplies	OPS	330	330	343	359	377	395	415	436	458	481	505
Computer Supplies - Software	OPS	150	350	364	380	399	419	440	462	485	510	535
Operating Supplies - Chemicals	Chemicals	290,000	300,000	312,000	326,000	342,342	359,459	377,432	396,304	416,119	436,925	458,771
Operating Supplies - Laboratory	OPS	16,000	16,500	17,160	17,932	18,829	19,770	20,759	21,797	22,887	24,031	25,232
Operating Supplies - Medical	OPS	1,400	250	260	272	285	300	315	330	347	364	382
Operating Supplies - Photo	OPS	0	0	0	0	0	0	0	0	0	0	0
Operating Supplies - Signs	OPS	270	250	260	272	285	300	315	330	347	364	382
Operating Supplies - Janitorial	OPS	1,000	1,040	1,082	1,130	1,187	1,246	1,308	1,374	1,443	1,515	1,590
Operating Supplies - Safety	OPS	2,800	3,000	3,120	3,260	3,423	3,595	3,774	3,963	4,161	4,369	4,588
Auto Expense - Parts & Repairs	OPS	4,500	5,000	5,200	5,434	5,706	5,991	6,291	6,605	6,935	7,282	7,646
Auto Expense - Tires	OPS	800	1,200	1,248	1,304	1,369	1,438	1,510	1,585	1,664	1,748	1,835
Auto Expense - Gas & Oil	OPS	6,750	7,000	7,280	7,608	7,988	8,387	8,807	9,247	9,709	10,195	10,705
Uniforms and Clothing	Uniform	3,000	3,120	3,214	3,310	3,409	3,512	3,617	3,725	3,837	3,952	4,071
Uniform & Rental Supplies	OpSupplies	7,850	7,850	8,164	8,531	8,958	9,406	9,876	10,370	10,888	11,433	12,005
Miscellaneous Supplies	OPS	1,130	1,200	1,248	1,304	1,369	1,438	1,510	1,585	1,664	1,748	1,835
Professional Services - Consulting	ProServices	5,000	5,500	5,665	5,835	6,010	6,190	6,376	6,567	6,764	6,967	7,176
Professional Services - SCADA	ProServices	40,000	40,000	41,200	42,436	43,709	45,020	46,371	47,762	49,195	50,671	52,191
Professional Services - Contract Employment	ProServices	0	0	0	0	0	0	0	0	0	0	0
Professional Services - Laboratory	ProServices	70,000	70,000	72,100	74,263	76,491	78,786	81,149	83,584	86,091	88,674	91,334
Professional Services - Lead/Copper	ProServices	0	0	0	0	0	0	0	0	0	0	0
Professional Services - Custodial	ProServices	8,500	9,000	9,270	9,548	9,835	10,130	10,433	10,746	11,069	11,401	11,743
Professional Services - Mosquito/Pest Control	ProServices	1,500	1,600	1,648	1,697	1,748	1,801	1,855	1,910	1,968	2,027	2,088
Professional Services - North Plant Roof 3MG	ProServices	0	0	0	0	0	0	0	0	0	0	0
Professional Services - Flood Recovery	ProServices	0	0	0	0	0	0	0	0	0	0	0
Professional Services - Sludge Removal	ProServices	35,000	38,000	39,140	40,314	41,524	42,769	44,052	45,374	46,735	48,137	49,581
Professional Services - Utility Rate Update	ProServices	10,000	10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048
Professional Services - Other	ProServices	5,000	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524
Utility Services - Gas	Utilities	15,000	15,500	16,120	16,765	17,435	18,133	18,858	19,612	20,397	21,213	22,061
Utility Services - Electricity	Utilities	117,500	120,000	124,800	129,792	134,984	140,383	145,998	151,838	157,912	164,228	170,797
Utility Services - Trash Removal	Utilities	2,000	2,060	2,142	2,228	2,317	2,410	2,506	2,607	2,711	2,819	2,932
Utility Services - Eco Cycle	Utilities	0	0	0	0	0	0	0	0	0	0	0
Utility Services - Hazardous Waste	Utilities	1,800	1,900	1,976	2,055	2,137	2,223	2,312	2,404	2,500	2,600	2,704
Communication Services - Telephone	Comm	1,220	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
Communication Services - Cellular Telephone	Comm	1,300	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Communication Services - Pagers	Comm	0	0	0	0	0	0	0	0	0	0	0
Communication Services - Internet & Cable	Comm	500	550	550	550	550	550	550	550	550	550	550
Communications - T1 Line	Comm	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Postage	OPS	4,000	4,100	4,264	4,456	4,679	4,913	5,158	5,416	5,687	5,971	6,270
Parts/Repairs/Maintenance - Buildings/Facilities	Repairs	255,000	27,000	28,080	29,344	30,811	32,351	33,969	35,667	37,451	39,323	41,289
Parts/Repairs/Maintenance - Equipment	Repairs	506,000	90,000	93,600	97,812	102,703	107,838	113,230	118,891	124,836	131,077	137,631
Parts/Repairs/Maintenance - Grounds	Repairs	11,500	11,845	12,319	12,873	13,517	14,193	14,902	15,647	16,430	17,251	18,114
Parts/Repairs/Maintenance - HVAC	Repairs	6,500	7,000	7,280	7,608	7,988	8,387	8,807	9,247	9,709	10,195	10,705
Parts/Repairs/Maintenance - Copiers	Repairs	1,500	1,800	1,872	1,956	2,054	2,157	2,265	2,378	2,497	2,622	2,753
Parts/Repairs/Maintenance - Software	Repairs	6,000	6,000	6,240	6,521	6,847	7,189	7,549	7,926	8,322	8,738	9,175
Parts/Repairs/Maintenance - Security	Repairs	700	1,000	1,040	1,087	1,141	1,198	1,258	1,321	1,387	1,456	1,529
Parts/Repairs/Maintenance - Other	Repairs	0	0	0	0	0	0	0	0	0	0	0
Equipment Rental	OPS	500	500	520	543	571	599	629	661	694	728	765
Solar Power Equipment Lease	Constant	0	0	0	0	0	0	0	0	0	0	0
Community Solar Panel Lease	OPS	0	0	0	0	0	0	0	0	0	0	0
Water Week Education	OPS	0	0	0	0	0	0	0	0	0	0	0
Water Conservation Rebates	OPS	8,000	8,000	8,320	8,694	9,129	9,586	10,065	10,568	11,097	11,651	12,234
Education Expense	OPS	5,000	5,500	5,720	5,977	6,276	6,590	6,920	7,266	7,629	8,010	8,411
Advertising/Marketing	OPS	200	200	208	217	228	240	252	264	277	291	306
Printing	OPS	3,500	3,500	3,640	3,804	3,994	4,194	4,403	4,624	4,855	5,097	5,352
Travel	OPS	540	700	728	761	799	839	881	925	971	1,019	1,070
Dues/Subscriptions/Books	OPS	6,000	6,200	6,448	6,738	7,075	7,429	7,800	8,190	8,600	9,030	9,481
Other Services and Charges	Constant	0	0	0	0	0	0	0	0	0	0	0
Lease Payment - Superior Water	Constant	0	0	0	0	0	0	0	0	0	0	0
Computer Replacement	Computer	2,540	2,540	2,543	2,543	2,543	2,543	2,543	2,543	2,543	2,543	2,543
Louisville Reservoir	Constant	0	0	0	0	0	0	0	0	0	0	0
Marshall Lake Spillway	Constant	0	0	0	0	0	0	0	0	0	0	0
Machinery & Equipment	Constant	0	0	0	0	0	0	0	0	0	0	0
Motor Vehicle/Road Equipment	Constant	0	0	0	0	0	0	0	0	0	0	0
Plant/Garage Equipment	Constant	0	0	0	0	0	0	0	0	0	0	0
Chlorination System North	Constant	0	0	0	0	0	0	0	0	0	0	0
Electric Gate North	Constant	0	0	0	0	0	0	0	0	0	0	0
High zone Pump North	Constant	0	0	0	0	0	0	0	0	0	0	0
Solar Bees	Constant	0	0	0	0	0	0	0	0	0	0	0
Filter Eff Valve Replacement North	Constant	0	0	0	0	0	0	0	0	0	0	0
Office Furniture and Fixtures	Constant	0	0	0	0	0	0	0	0	0	0	0
Computer Software	Constant	0	0	0	0	0	0	0	0	0	0	0
North Basin Reconstruction	Constant	0	0	0	0	0	0	0	0	0	0	0
North Laboratory Remodel	Constant	0	0	0	0	0	0	0	0	0	0	0
Total Water Plant Operations		2,303,749	1,704,599	1,772,479	1,846,365	1,926,315	2,009,903	2,097,301	2,188,692	2,284,267	2,384,225	2,488,777

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Forecast Operations and Maintenance Expenses												
Cost Description	Category	Estimated	Budget	Forecast								
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Total Raw Water Operations (462)												
Regular Salaries	Labor	55,260	56,760	59,030	61,392	63,847	66,401	69,057	71,820	74,692	77,680	80,787
Temporary Salaries	Labor	0	0	0	0	0	0	0	0	0	0	0
Overtime Pay	Labor	2,420	2,210	2,298	2,390	2,486	2,585	2,689	2,796	2,908	3,025	3,146
FICA Expense	FICA	4,258	4,342	4,516	4,696	4,884	5,080	5,283	5,494	5,714	5,942	6,180
Retirement Contribution	Retirement	3,172	3,243	3,373	3,508	3,648	3,794	3,946	4,103	4,268	4,438	4,616
Health Insurance	Benefits	7,345	8,079	8,640	9,206	9,804	10,540	11,278	12,068	12,912	13,816	14,784
Health Insurance - Dental	Benefits	573	601	640	685	733	784	839	898	961	1,028	1,100
Health Insurance - Vision	Benefits	140	140	149	160	171	183	195	209	224	239	256
Life, AD&D & LTD Insurance	Benefits	558	573	610	653	699	748	800	856	916	980	1,049
Employee Assistance Plan	Benefits	27	27	29	31	33	35	38	40	43	46	49
Workers Compensation	WorkComp	989	1,016	1,036	1,057	1,078	1,100	1,122	1,144	1,167	1,190	1,214
Non-Capital Furniture/Equipment/Tools	OPS	400	500	520	543	571	599	629	661	694	728	765
Operating Supplies - Chemicals	Chemicals	2,500	3,000	3,120	3,260	3,423	3,595	3,774	3,963	4,161	4,369	4,588
Miscellaneous Supplies	OPS	0	0	0	0	0	0	0	0	0	0	0
Professional Services - Consulting	ProServices	175,000	180,000	185,400	190,962	196,691	202,592	208,669	214,929	221,377	228,019	234,859
Professional Services - Mosquito/Pest Control	ProServices	0	0	0	0	0	0	0	0	0	0	0
Professional Services - Water Conservation Plan	ProServices	0	0	0	0	0	0	0	0	0	0	0
Professional Services - Landfill	ProServices	3,750	4,000	4,120	4,244	4,371	4,502	4,637	4,776	4,919	5,067	5,219
Professional Services - Other	ProServices	0	0	0	0	0	0	0	0	0	0	0
Legal Services - General	Legal	111,500	112,500	116,438	120,513	124,731	129,096	133,615	138,291	143,131	148,141	153,326
Legal Services - FECI	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Lafayette Water Matters (LAFOP)	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Marshall Transfer (MARSH)	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Gen Wtr Rts Wk (VILLE)	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - City Bldr 90CW193 (BLROP)	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Golf Course Exchg (GCDIL)	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - New Chng Case for Untmsfrd Prop	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Coal Ridge Ditch (CRDRY)	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Wtr Use Coal Rdg (CRCBT)	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Water Rights	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Vranesh and Raisch	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Gapter	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Eldora	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Sterns	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Ticken and Hill	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - BFI Boulder	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Lsvl/Broomfield	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Lsvl/Marsh Crsg	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Boulder	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Marsh Trans	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - LSV.CMW.C-SO	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - LSV Coal Creek	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - LSV Hecla	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - LSV Frisco-So	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - LSV LAF-SO	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - LSV LF Dillon	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - CRDIL	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - HRDIL	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Windy Gap	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Johnson	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Broomfield 09CW96	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Baseline Res Exchange	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Louisville Pipeline	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Harper 1st Enlargement	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Mesa Trail	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - FlyFisher Group	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Services - Reimbursed Expenses	Legal	0	0	0	0	0	0	0	0	0	0	0
Legal Expense - Other (One time Chgs)	Legal	0	0	0	0	0	0	0	0	0	0	0
Utility Services - Electricity	Utilities	9,500	10,000	10,400	10,816	11,249	11,699	12,167	12,653	13,159	13,686	14,233
Communication Services - Telephone	Comm	360	420	420	420	420	420	420	420	420	420	420
Communication Services - Cellular Telephone	Comm	200	350	350	350	350	350	350	350	350	350	350
Parts/Repairs/Maintenance - Buildings/Facilities	Repairs	2,000	2,500	2,600	2,717	2,853	2,995	3,145	3,303	3,468	3,641	3,823
Parts/Repairs/Maintenance - Equipment	Repairs	6,000	7,000	7,280	7,608	7,988	8,387	8,807	9,247	9,709	10,195	10,705
Parts/Repairs/Maint - Grounds	Repairs	10,000	12,500	13,000	13,585	14,264	14,977	15,726	16,513	17,338	18,205	19,115
Parts/Repairs/Maintenance - Other	Repairs	0	0	0	0	0	0	0	0	0	0	0
Travel	OPS	500	600	624	652	685	719	755	793	832	874	918
Ditch Assessment	OPS	72,000	75,000	78,000	81,510	85,586	89,865	94,358	99,076	104,030	109,231	114,693
Marshall Lake Assessments	OPS	12,000	12,000	12,480	13,042	13,694	14,378	15,097	15,852	16,645	17,477	18,351
Marshall Lake Storage/Carriage Fees	OPS	64,000	65,000	67,600	70,642	74,174	77,883	81,777	85,866	90,159	94,667	99,400
NCWCD CBT Annual Assessments	OPS	105,000	111,000	115,440	120,635	126,667	133,000	139,650	146,632	153,964	161,662	169,745
Windy Gap Pumping & Carriage	OPS	27,000	29,000	30,160	31,517	33,093	34,748	36,485	38,309	40,225	42,236	44,348
NCWCD SWSP Yearly Maintenance	OPS	200,000	200,000	208,000	217,360	228,228	239,639	251,621	264,202	277,413	291,283	305,847
NCWCD - SWSP Pumping Charges	OPS	10,000	10,000	10,400	10,868	11,411	11,982	12,581	13,210	13,871	14,564	15,292
SPWRAP Assessment	OPS	8,000	8,500	8,840	9,238	9,700	10,185	10,694	11,229	11,790	12,380	12,999
Other Services and Charges	OPS	0	0	0	0	0	0	0	0	0	0	0
Lease Payment - Superior Water	Constant	0	0	0	0	0	0	0	0	0	0	0
Total Raw Water Operations		894,452	920,861	955,477	994,259	1,037,576	1,082,861	1,130,204	1,179,703	1,231,460	1,285,580	1,342,176

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City of Louisville - Water Utility												
Forecast Operations and Maintenance Expenses												
Cost Description	Category	Estimated	Budget	Forecast								
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Total Distribution (463)												
Regular Salaries	Labor	268,147	274,875	285,870	297,305	309,197	321,565	334,427	347,805	361,717	376,185	391,233
Temporary Salaries	Labor	0	0	0	0	0	0	0	0	0	0	0
Overtime Pay	Labor	17,765	17,865	18,580	19,323	20,096	20,900	21,736	22,605	23,509	24,449	25,427
FICA Expense	FICA	20,841	21,303	22,155	23,041	23,963	24,921	25,918	26,955	28,033	29,155	30,321
Retirement Contribution	Retirement	15,725	16,101	16,745	17,415	18,111	18,836	19,589	20,373	21,188	22,035	22,917
Health Insurance	Benefits	47,319	52,008	55,389	59,266	63,414	67,853	72,603	77,685	83,123	88,942	95,168
Health Insurance - Dental	Benefits	3,657	3,836	4,085	4,371	4,677	5,005	5,355	5,730	6,131	6,560	7,019
Health Insurance - Vision	Benefits	693	693	738	790	845	904	967	1,035	1,108	1,185	1,268
Life, AD&D & LTD Insurance	Benefits	2,730	2,798	2,980	3,188	3,412	3,650	3,906	4,179	4,472	4,785	5,120
Employee Assistance Plan	Benefits	129	129	137	147	157	168	180	193	206	221	236
Workers Compensation	WorkComp	7,118	7,318	7,464	7,614	7,766	7,921	8,080	8,241	8,406	8,574	8,746
Office Supplies	OPS	250	250	260	272	285	300	315	330	347	364	382
Non-Capital Furniture/Equipment/Tools	OPS	7,875	8,269	8,600	8,987	9,436	9,908	10,403	10,923	11,470	12,043	12,645
Non-Capital Computer Hardware	OPS	0	0	0	0	0	0	0	0	0	0	0
Non-Capital Computer Software	OPS	0	0	0	0	0	0	0	0	0	0	0
Computer Supplies	OpSupplies	0	0	0	0	0	0	0	0	0	0	0
Operating Supplies - Safety	OpSupplies	2,409	2,532	2,633	2,752	2,889	3,034	3,186	3,345	3,512	3,688	3,872
Meter Pits & Meters	Repairs	115,000	115,000	119,600	124,982	131,231	137,793	144,682	151,916	159,512	167,488	175,862
Auto Expense - Parts & Repairs	OPS	8,000	8,000	8,320	8,694	9,129	9,586	10,065	10,568	11,097	11,651	12,234
Auto Expense - Tires	OPS	1,000	1,000	1,040	1,087	1,141	1,198	1,258	1,321	1,387	1,456	1,529
Auto Expense - Gas & Oil	OPS	17,500	17,500	18,200	19,019	19,970	20,968	22,017	23,118	24,274	25,487	26,762
Uniforms and Clothing	Uniform	3,045	3,197	3,293	3,392	3,493	3,598	3,706	3,817	3,932	4,050	4,171
Miscellaneous Supplies	OPS	385	385	400	418	439	461	484	509	534	561	589
Professional Services - Consulting	ProServices	5,750	5,750	5,923	6,100	6,283	6,472	6,666	6,866	7,072	7,284	7,502
Professional Services - Landfill	ProServices	5,250	5,513	5,678	5,849	6,024	6,205	6,391	6,583	6,780	6,984	7,193
Professional Services - Other	ProServices	5,943	6,263	6,451	6,644	6,844	7,049	7,261	7,478	7,703	7,934	8,172
Utility Services - Gas	Utilities	675	710	738	768	799	831	864	898	934	972	1,011
Utility Services - Electricity	Utilities	1,500	1,575	1,638	1,704	1,772	1,843	1,916	1,993	2,073	2,155	2,242
Utility Services - Trash Removal	Utilities	262	275	286	297	309	322	335	348	362	376	391
Utility Services - Hazardous Waste	Utilities	10	10	10	11	11	12	12	13	13	14	14
Utility Services - Water	Utilities	262	276	287	299	310	323	336	349	363	378	393
Communication Services - Telephone	Comm	0	0	0	0	0	0	0	0	0	0	0
Communication Services - Cellular Telephone	Comm	500	500	500	500	500	500	500	500	500	500	500
Communication Services - Internet	Comm	105	105	105	105	105	105	105	105	105	105	105
Postage	OPS	0	0	0	0	0	0	0	0	0	0	0
Parts/Repairs/Maintenance - Buildings/Facilities	Repairs	263	276	287	300	315	331	347	365	383	402	422
Parts/Repairs/Maintenance - Equipment	Repairs	7,350	7,772	8,083	8,447	8,869	9,312	9,778	10,267	10,780	11,319	11,885
Parts/Repairs/Maintenance - Utility Lines	Repairs	25,000	25,000	26,000	27,170	28,529	29,955	31,453	33,025	34,677	36,410	38,231
Parts/Repairs/Maintenance - Software	Repairs	6,313	6,313	6,566	6,861	7,204	7,564	7,942	8,340	8,757	9,194	9,654
Parts/Repairs/Maintenance - Other	Repairs	671	703	731	764	802	842	884	929	975	1,024	1,075
Equipment Rental	OPS	200	200	208	217	228	240	252	264	277	291	306
Education Expense	OPS	4,500	4,500	4,680	4,891	5,135	5,392	5,661	5,945	6,242	6,554	6,882
Printing	OPS	425	425	442	462	485	509	535	561	590	619	650
Travel	OPS	70	70	73	76	80	84	88	92	97	102	107
Dues/Subscriptions/Books	OPS	235	235	244	255	268	282	296	310	326	342	359
Other Services and Charges	OPS	585	585	608	636	668	701	736	773	811	852	895
Water Projects Engineering	OPS	0	0	0	0	0	0	0	0	0	0	0
Tools and Work Equipment	OPS	0	0	0	0	0	0	0	0	0	0	0
Motor Vehicle/Road Equipment	OPS	0	0	0	0	0	0	0	0	0	0	0
Waterline Replacement	OPS	0	0	0	0	0	0	0	0	0	0	0
Replacement Meters	OPS	0	0	0	0	0	0	0	0	0	0	0
Total Distribution		605,457	620,115	646,028	674,417	705,193	737,441	771,235	806,653	843,776	882,692	923,490
Total O&M		\$4,545,343	\$3,992,286	\$4,151,669	\$4,326,726	\$4,516,741	\$4,715,531	\$4,923,522	\$5,141,161	\$5,368,916	\$5,607,282	\$5,856,776

City of Louisville
2018 Financial Plan Update
Wastewater Operating and Capital Fund Cash Flow

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City of Louisville - Wastewater Utility Forecast Operating Fund Cash Flow											
Description	Estimated 2017	Budget 2018	Forecast								
			2019	2020	2021	2022	2023	2024	2025	2026	2027
Beginning Operating Fund Balance	\$11,821,589	\$2,964,110	\$2,493,520	\$2,283,281	\$1,982,544	\$2,006,657	\$1,533,978	\$1,506,590	\$2,080,380	\$2,094,371	\$2,264,007
Revenue											
Rate Revenue	2,992,979	3,237,977	3,476,994	3,722,469	3,998,049	4,280,069	4,588,833	4,919,871	5,274,791	5,475,209	5,522,252
Unclassified Charges for Services	0	0	0	0	0	0	0	0	0	0	0
Grant Revenue	0	0	0	0	0	0	0	0	0	0	0
Delinquent Charges	4,400	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Pretreatment Fees	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
RV Dump Station Fees	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Miscellaneous Revenues	210	0	0	0	0	0	0	0	0	0	0
Interest Earnings	35,000	40,000	29,855	26,661	24,933	22,129	19,004	22,419	26,092	27,240	28,813
Net Increase (Decrease) in Fair Value	0	0	0	0	0	0	0	0	0	0	0
Biosolids Revenue	0	0	0	0	0	0	0	0	0	0	0
Solar Power Renewable Energy Credit	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
Sale of Fixed Assets	50,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Transfer from Golf Course	0	0	0	0	0	0	0	0	0	0	0
Total Revenue	3,104,089	3,343,477	3,572,349	3,814,631	4,088,481	4,367,698	4,673,336	5,007,790	5,366,383	5,567,949	5,616,565
Revenue Requirements											
Operating Expenses	1,941,254	2,109,852	2,193,883	2,284,330	2,380,635	2,481,223	2,586,291	2,696,052	2,810,727	2,930,550	3,055,765
Debt Service - Existing	1,278,509	1,278,243	1,282,314	1,279,378	1,282,245	1,280,451	1,278,883	1,282,221	2,014,212	2,011,609	2,010,449
Debt Service - Proposed	0	0	0	0	0	0	0	0	0	0	0
Transfer Out to Capital Fund	8,741,805	425,972	306,391	551,661	401,487	1,078,703	835,551	455,727	527,453	456,152	468,353
Transfer Out to Debt Service Reserve											
Total Revenue Requirement	11,961,568	3,814,067	3,782,588	4,115,368	4,064,368	4,840,377	4,700,725	4,434,000	5,352,392	5,398,312	5,534,567
Annual Surplus/(Deficit)	(8,857,479)	(470,590)	(210,239)	(300,737)	24,114	(472,679)	(27,388)	573,790	13,991	169,636	81,997
Ending Operating Fund Balance	2,964,110	2,493,520	2,283,281	1,982,544	2,006,657	1,533,978	1,506,590	2,080,380	2,094,371	2,264,007	2,346,005
Target Operating Reserve	638,220	693,650	721,277	751,012	782,675	815,745	850,287	886,373	924,075	963,469	1,004,635
Ending Balance Excess / (Shortfall)	\$2,325,890	\$1,799,870	\$1,562,004	\$1,231,531	\$1,223,983	\$718,234	\$656,303	\$1,194,007	\$1,170,296	\$1,300,539	\$1,341,370
DSCR without Tap Fees (Target =1.2)	0.91	0.97	1.07	1.20	1.33	1.47	1.63	1.80	1.27	1.31	1.27
Projected Revenue Increase	0.0%	7.0%	6.0%	6.0%	6.5%	7.0%	7.0%	7.0%	7.0%	2.0%	0.0%

City of Louisville - Wastewater Utility Forecast Capital Fund Cash Flow											
Description	Estimated 2017	Budget 2018	Forecast								
			2019	2020	2021	2022	2023	2024	2025	2026	2027
Beginning Fund Balance	\$0	\$277,128	\$457,471	\$475,211	\$494,251	\$507,801	\$515,701	\$535,761	\$551,501	\$560,401	\$570,401
Sources of Funds											
Tap Fee Revenue	552,480	636,780	683,520	175,320	32,800	32,800	69,937	70,217	70,498	70,780	71,063
Transfer In From Operating Fund	8,741,805	425,972	306,391	551,661	401,487	1,078,703	835,551	455,727	527,453	456,152	468,353
Bond/Loan Proceeds	0	0	0	0	0	0	0	0	0	0	0
Capital Fund Interest Earnings	0	4,591	5,829	6,059	6,263	6,397	6,572	6,795	6,949	7,068	7,184
Total Sources of Funds	9,294,285	1,067,343	995,740	733,040	440,550	1,117,900	912,060	532,740	604,900	534,000	546,600
Uses of Funds											
CIP	9,017,158	887,000	978,000	714,000	427,000	1,110,000	892,000	517,000	596,000	524,000	538,000
Total Uses of Funds	9,017,158	887,000	978,000	714,000	427,000	1,110,000	892,000	517,000	596,000	524,000	538,000
Annual Surplus/(Deficit)	277,128	180,343	17,740	19,040	13,550	7,900	20,060	15,740	8,900	10,000	8,600
Ending Fund Balance	277,128	457,471	475,211	494,251	507,801	515,701	535,761	551,501	560,401	570,401	579,001
Target Fund Balance (2% of Fixed Assets)	277,128	457,471	475,211	494,251	507,801	515,701	535,761	551,501	560,401	570,401	579,001
Ending Balance Excess/(Shortfall)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Projected Tap Fee Increase	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

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Wastewater CIP Forecast

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City of Louisville - Wastewater Utility Forecast CIP without Inflation											
Project	Estimated 2017	Budget 2018	Forecast								
			2019	2020	2021	2022	2023	2024	2025	2026	2027
Wastewater Plant Upgrade	7,572,642										
Sewer Utility Line Replacement	330,000	350,000	365,000	370,000	380,000	390,000	400,000	410,000	420,000	430,000	430,000
Sewer Utility Line Replacement - City Streets	1,000,000	430,000									
Reuse System Equipment Replacement	3,390	32,000		62,500			302,000				
Sewer Main Video	25,000										
Vehicle & Equipment Replacement			70,000	25,000		40,000			80,000		
Solar Power Equipment Lease Buyout						40,000					
Facilities Maintenance-Roof repairs etc.											
Golf Course Re-Use Automation of Valve Actuator/SCADA											
Enterprise Resource Planning System (11.5%)											
Equipment Service-Drum Thickener, Centrifuge, Blowers			31,000	220,000		25,000		35,000			
SCADA Upgrades							85,000				
WWTP Building Upgrade			150,000		15,000	500,000					
Local Limits Consulting and development	30,750										
Polymer Liquid Drum thick			25,000								
Lucity Asset Management Software (25%)	28,876	25,000									
Lab Equipment	6,500										
Laboratory Grade Water DI Unit						8,000					
WWTP Security Upgrades											
CTC Lift Station Controls	20,000										
Reuse Masterplan Study											
Utility Rate Update Study											
Centrifuge Overhaul Maintenance			40,000								
Vibration Monitoring			40,000								
Automated Valves (air system)			75,000								
Steel Ranch Lift Station		50,000									
Sanitary Sewer Maintenance Equipment			156,000								
Total Growth Related	0	0	0	0	0	0	0	0	0	0	0
Total Non-Growth Related	9,017,158	887,000	952,000	677,500	395,000	1,003,000	787,000	445,000	500,000	430,000	430,000
Updated Total CIP Before Inflation Adjustment	\$9,017,158	\$887,000	\$952,000	\$677,500	\$395,000	\$1,003,000	\$787,000	\$445,000	\$500,000	\$430,000	\$430,000

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City of Louisville - Wastewater Utility Forecast CIP with Inflation											
Project	Estimated 2017	Budget 2018	Forecast								
			2019	2020	2021	2022	2023	2024	2025	2026	2027
Wastewater Plant Upgrade	\$7,572,642	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sewer Utility Line Replacement	330,000	\$350,000	\$375,000	\$389,000	\$410,000	\$431,000	\$453,000	\$476,000	\$500,000	\$524,000	\$538,000
Sewer Utility Line Replacement - City Streets	1,000,000	\$430,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reuse System Equipment Replacement	3,390	\$32,000	\$0	\$66,000	\$0	\$0	\$342,000	\$0	\$0	\$0	\$0
Sewer Main Video	25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Vehicle & Equipment Replacement	0	\$0	\$72,000	\$27,000	\$0	\$45,000	\$0	\$0	\$96,000	\$0	\$0
Solar Power Equipment Lease Buyout	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Facilities Maintenance-Roof repairs etc.	0	\$0	\$0	\$0	\$0	\$45,000	\$0	\$0	\$0	\$0	\$0
Golf Course Re-Use Automation of Valve Actuator/SCADA	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Enterprise Resource Planning System (11.5%)	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment Service-Drum Thickener, Centrifuge, Blowers	0	\$0	\$32,000	\$232,000	\$0	\$28,000	\$0	\$41,000	\$0	\$0	\$0
SCADA Upgrades	0	\$0	\$0	\$0	\$0	\$0	\$97,000	\$0	\$0	\$0	\$0
WWTP Building Upgrade	0	\$0	\$154,000	\$0	\$17,000	\$552,000	\$0	\$0	\$0	\$0	\$0
Local Limits Consulting and development	30,750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Polymer Liquid Drum thick	0	\$0	\$26,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lucity Asset Management Software (25%)	28,876	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lab Equipment	6,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Laboratory Grade Water DI Unit	0	\$0	\$0	\$0	\$0	\$9,000	\$0	\$0	\$0	\$0	\$0
WWTP Security Upgrades	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CTC Lift Station Controls	20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reuse Masterplan Study	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Utility Rate Update Study	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Centrifuge Overhaul Maintenance	0	\$0	\$41,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Vibration Monitoring	0	\$0	\$41,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Automated Valves (air system)	0	\$0	\$77,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Steel Ranch Lift Station	0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sanitary Sewer Maintenance Equipment	0	\$0	\$160,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Growth Related	0	0	0	0	0	0	0	0	0	0	0
Total Non-Growth Related	9,017,158	887,000	978,000	714,000	427,000	1,110,000	892,000	517,000	596,000	524,000	538,000
Total CIP After Inflation Adjustment	\$9,017,158	\$887,000	\$978,000	\$714,000	\$427,000	\$1,110,000	\$892,000	\$517,000	\$596,000	\$524,000	\$538,000
Total Inflation Adjustment	\$0	\$0	\$26,000	\$36,500	\$32,000	\$107,000	\$105,000	\$72,000	\$96,000	\$94,000	\$108,000

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Wastewater O&M Forecast**

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City of Louisville - Wastewater Utility												
Forecast O&M Expenses												
Cost Description	Escalation Category	Estimated 2017	Budget 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	1	2	3	4	5	6	7	8	9	10	11	12
Central Charges (110)												
Regular Salaries	Labor	\$201,433	\$190,415	\$198,032	\$205,953	\$214,191	\$222,759	\$231,669	\$240,936	\$250,573	\$260,596	\$271,020
Temporary Salaries	Labor	0	0	0	0	0	0	0	0	0	0	0
Overtime Pay	Labor	890	910	946	984	1,024	1,065	1,107	1,151	1,197	1,245	1,295
FICA Expense	FICA	13,969	13,178	13,705	14,253	14,823	15,416	16,033	16,674	17,341	18,035	18,756
Retirement Contribution	Retirement	12,790	12,183	12,670	13,177	13,704	14,252	14,822	15,415	16,032	16,673	17,340
Health Insurance	Benefits	22,146	22,694	24,169	25,861	27,671	29,608	31,681	33,898	36,271	38,810	41,527
Health Insurance - Dental	Benefits	1,858	1,807	1,924	2,059	2,203	2,358	2,523	2,699	2,888	3,090	3,307
Health Insurance - Vision	Benefits	370	348	371	397	424	454	486	520	556	595	637
Life, AD&D & LTD Insurance	Benefits	1,776	1,684	1,793	1,919	2,053	2,197	2,351	2,515	2,691	2,880	3,081
Employee Assistance Plan	Benefits	58	54	58	62	66	70	75	81	86	92	99
Workers Compensation	WorkComp	1,364	1,304	1,330	1,357	1,384	1,411	1,440	1,469	1,498	1,528	1,558
Unemployment Compensation	Labor	0	0	0	0	0	0	0	0	0	0	0
Salary Contingency	Labor	0	0	0	0	0	0	0	0	0	0	0
Office Supplies	OPS	50	50	52	54	57	60	63	66	69	73	76
Non-Capital Furniture/Equipment/Tools	OPS	450	500	520	543	571	599	629	661	694	728	765
Professional Services - Audit	ProServices	8,520	9,370	9,651	9,941	10,239	10,546	10,862	11,188	11,524	11,870	12,226
Professional Services - Investment Fees	ProServices	5,700	5,700	5,871	6,047	6,229	6,415	6,608	6,806	7,010	7,221	7,437
Professional Services - Banking Fees	ProServices	2,700	2,700	2,781	2,864	2,950	3,039	3,130	3,224	3,321	3,420	3,523
Professional Services - Microfilming	ProServices	0	0	0	0	0	0	0	0	0	0	0
Legal Services - General	Legal	7,500	7,500	7,763	8,034	8,315	8,606	8,908	9,219	9,542	9,876	10,222
Parts/Repairs/Maintenance - Equipment	Repairs	100	100	104	109	114	120	126	132	139	146	153
Communication Services - Cellular Telephone	Comm	350	350	350	350	350	350	350	350	350	350	350
Communication Services - Internet	Comm	110	110	110	110	110	110	110	110	110	110	110
Insurance	Insurance	39,600	43,600	45,780	48,527	51,438	54,525	57,796	61,264	64,940	68,836	72,966
Insurance Deductibles	Insurance	0	0	0	0	0	0	0	0	0	0	0
Education Expense	Inflation	105	105	108	112	116	120	124	128	132	136	140
Printing	OPS	25	25	26	27	29	30	31	33	35	36	38
Travel	OPS	50	50	52	54	57	60	63	66	69	73	76
Business and Auto Allowance	OPS	1,945	1,985	2,064	2,157	2,265	2,378	2,497	2,622	2,753	2,891	3,036
Dues/Subscriptions/Books	OPS	35	35	36	38	40	42	44	46	49	51	54
Louisville Revitalization Commission	OPS	0	70	73	76	80	84	88	92	97	102	107
Depreciation Expense	Constant	0	0	0	0	0	0	0	0	0	0	0
Computer Replacement	Computer	585	585	586	586	586	586	586	586	586	586	586
Loss on Claims and Judgments	Constant	0	0	0	0	0	0	0	0	0	0	0
Loss on Asset Write-Offs	Constant	0	0	0	0	0	0	0	0	0	0	0
Total Central Charges		324,479	317,412	330,926	345,652	361,089	377,261	394,202	411,953	430,554	450,049	470,485
Utility Billing (210)												
Regular Salaries	Labor	34,326	35,416	36,833	38,306	39,838	41,432	43,089	44,813	46,605	48,469	50,408
Temporary Salaries	Labor	0	0	0	0	0	0	0	0	0	0	0
Overtime Pay	Labor	2,732	2,732	2,841	2,955	3,073	3,196	3,324	3,457	3,595	3,739	3,888
FICA Expense	FICA	2,696	2,769	2,880	2,995	3,115	3,239	3,369	3,504	3,644	3,790	3,941
Retirement Contribution	Retirement	2,038	2,098	2,182	2,269	2,360	2,454	2,553	2,655	2,761	2,871	2,986
Health Insurance	Benefits	6,835	7,519	8,008	8,568	9,168	9,810	10,497	11,231	12,017	12,859	13,759
Health Insurance - Dental	Benefits	501	526	560	599	641	686	734	786	841	900	963
Health Insurance - Vision	Benefits	100	100	107	114	122	130	140	149	160	171	183
Life, AD&D & LTD Insurance	Benefits	351	362	386	413	441	472	505	541	579	619	662
Employee Assistance Plan	Benefits	18	18	19	21	22	23	25	27	29	31	33
Workers Compensation	WorkComp	1,032	1,062	1,083	1,105	1,127	1,150	1,173	1,196	1,220	1,244	1,269
Unemployment Compensation	Labor	0	0	0	0	0	0	0	0	0	0	0
Office Supplies	OPS	200	200	208	217	228	240	252	264	277	291	306
Non-Capital Furniture/Equipment/Tools	OPS	0	0	0	0	0	0	0	0	0	0	0
Uniforms and Clothing	Uniform	0	0	0	0	0	0	0	0	0	0	0
Non-Capital Computer Software	OPS	0	0	0	0	0	0	0	0	0	0	0
Professional Services - Bank Charges	ProServices	23,500	25,000	25,750	26,523	27,318	28,138	28,982	29,851	30,747	31,669	32,619
Professional Services - Other	ProServices	18,750	19,500	20,085	20,688	21,308	21,947	22,606	23,284	23,983	24,702	25,443
Postage	OPS	15,000	15,000	15,600	16,302	17,117	17,973	18,872	19,815	20,806	21,846	22,939
Parts/Repairs/Maintenance - Equipment	Repairs	1,000	1,000	1,040	1,087	1,141	1,198	1,258	1,321	1,387	1,456	1,529
Parts/Repairs/Maintenance - Software	Repairs	4,750	5,000	5,200	5,434	5,706	5,991	6,291	6,605	6,935	7,282	7,646
Education Expense	Inflation	0	0	0	0	0	0	0	0	0	0	0
Printing	OPS	9,200	9,660	10,046	10,498	11,023	11,575	12,153	12,761	13,399	14,069	14,772
Travel	Inflation	0	0	0	0	0	0	0	0	0	0	0
Machinery and Equipment-General	Inflation	0	0	0	0	0	0	0	0	0	0	0
Total Utility Billing		123,029	127,962	132,827	138,093	143,750	149,655	155,821	162,259	168,984	176,009	183,347
Total Wastewater Engineering (423)												
Regular Salaries	Labor	32,905	33,087	34,410	35,787	37,218	38,707	40,255	41,866	43,540	45,282	47,093
Temporary Salaries	Labor	0	0	0	0	0	0	0	0	0	0	0
Overtime Pay	Labor	0	0	0	0	0	0	0	0	0	0	0
FICA Expense	FICA	2,383	2,395	2,491	2,590	2,694	2,802	2,914	3,030	3,152	3,278	3,409
Retirement Contribution	Retirement	1,810	1,820	1,893	1,969	2,047	2,129	2,214	2,303	2,395	2,491	2,590
Health Insurance	Benefits	3,607	3,995	4,255	4,553	4,871	5,212	5,577	5,967	6,385	6,832	7,310
Health Insurance - Dental	Benefits	278	293	312	334	357	382	409	438	468	501	536
Health Insurance - Vision	Benefits	71	71	76	81	87	93	99	106	113	121	130
Life, AD&D & LTD Insurance	Benefits	311	313	333	357	382	408	437	468	500	535	573
Employee Assistance Plan	Benefits	10	10	11	12	13	14	15	16	17	18	19
Workers Compensation	WorkComp	234	236	241	246	250	255	261	266	271	277	282
Unemployment Compensation	Labor	0	0	0	0	0	0	0	0	0	0	0
Office Supplies	OPS	420	440	458	478	502	527	554	581	610	641	673
Computer Supplies	OPS	20	20	21	22	23	24	25	26	28	29	31
Non-Capital Computer Software	OPS	100	100	104	109	114	120	126	132	139	146	153
Operation Supplies - Safety	OPS	60	60	62	65	68	72	75	79	83	87	92
Non-Capital Furniture/Equipment/Tools	OPS	940	980	1,019	1,065	1,118	1,174	1,233	1,295	1,359	1,427	1,499
Miscellaneous Supplies	OPS	40	40	42	43	46	48	50	53	55	58	61
Uniforms and Clothing	Uniform	0	0	0	0	0	0	0	0	0	0	0
Auto Expense-Parts & Repairs	OPS	220	240	250	261	274	288	302	317	333	350	367
Auto Expense-Tires	OPS	0	0	0	0	0	0	0	0	0	0	0
Gas & Oil	OPS	420	440	458	478	502	527	554	581	610	641	673
Printing	OPS	320	340	354	370	388	407	428	449	472	495	520
Travel	OPS	20	20	21	22	23	24	25	26	28	29	31
Business and Auto Allowance	OPS	0	0	0	0	0	0	0	0	0	0	0
Dues/Subscriptions/Books	OPS	260	280	291	304	320	335	352	370	388	408	428
Communication Svcs-Cell Phone	OPS	0	0	0	0	0	0	0	0	0	0	0
Prof Serv-Consulting	OPS	25,220	25,240	26,250	27,431	28,802	30,242	31,755	33,342	35,009	36,760	38,598
Parts/Repairs/Maint-Copiers	Repairs	240	260	270	283	297	312	327	343	361	379	398
Parts/Repairs/Maint-Software	Repairs	1,160	1,220	1,269	1,326	1,392	1,462	1,535	1,612	1,692	1,777	1,866
Total Wastewater Engineering		71,049	71,900	74,888	78,183	81,788	85,564	89,521	93,666	98,009	102,560	107,330

City of Louisville - Wastewater Utility												
Forecast O&M Expenses												
Cost Description	Escalation Category	Estimated	Budget	Forecast								
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Collectors (471)												
Regular Salaries	Labor	125,882	129,336	134,509	139,890	145,485	151,305	157,357	163,651	170,197	177,005	184,085
Overtime Pay	Labor	8,466	8,566	8,909	9,265	9,636	10,021	10,422	10,839	11,273	11,721	12,192
FICA Expense	FICA	9,794	10,033	10,434	10,852	11,286	11,737	12,207	12,695	13,203	13,731	14,280
Retirement Contribution	Retirement	7,389	7,585	7,888	8,204	8,532	8,873	9,228	9,597	9,981	10,381	10,796
Health Insurance	Benefits	21,933	24,125	25,693	27,492	29,416	31,475	33,678	36,036	38,558	41,258	44,146
Health Insurance - Dental	Benefits	1,693	1,777	1,893	2,025	2,167	2,318	2,481	2,654	2,840	3,039	3,252
Health Insurance - Vision	Benefits	323	323	344	368	394	421	451	482	516	552	591
Life, AD&D & LTD Insurance	Benefits	1,283	1,317	1,403	1,501	1,606	1,718	1,839	1,967	2,105	2,252	2,410
Employee Assistance Plan	Benefits	62	62	66	71	76	81	87	93	99	106	113
Workers Compensation	WorkComp	3,334	3,430	3,499	3,569	3,640	3,713	3,787	3,863	3,940	4,019	4,099
Non-Capital Furniture/Equipment/Tools	OPS	2,000	2,000	2,080	2,174	2,282	2,396	2,516	2,642	2,774	2,913	3,058
Operating Supplies - Janitorial	OPS	165	175	182	190	200	210	220	231	243	255	268
Operating Supplies - Chemicals	OPS	200	200	208	217	228	240	252	264	277	291	306
Operating Supplies - Safety	OPS	2,500	2,550	2,652	2,771	2,910	3,055	3,208	3,369	3,537	3,714	3,900
Auto Expense - Parts & Repairs	Repairs	1,000	1,000	1,040	1,087	1,141	1,198	1,258	1,321	1,387	1,456	1,529
Auto Expense - Tires	OPS	1,900	1,900	1,976	2,065	2,168	2,277	2,390	2,510	2,635	2,767	2,906
Uniforms and Clothing	Uniform	3,045	3,197	3,293	3,392	3,493	3,598	3,706	3,817	3,932	4,050	4,171
Professional Services - Consulting	ProServices	943	988	1,048	1,112	1,185	1,260	1,339	1,418	1,500	1,585	1,672
Professional Services - Landfill	ProServices	2,625	2,756	2,839	2,924	3,012	3,102	3,195	3,291	3,390	3,491	3,596
Professional Services - Other	ProServices	30,000	55,000	56,550	58,350	60,100	61,903	63,760	65,673	67,643	69,672	71,763
Utility Services - Gas	Utilities	1,339	1,406	1,462	1,521	1,582	1,645	1,711	1,779	1,850	1,924	2,001
Utility Services - Electricity	Utilities	1,500	1,575	1,638	1,704	1,772	1,843	1,916	1,993	2,073	2,155	2,242
Utility Services - Trash Removal	Utilities	262	275	286	297	309	322	335	348	362	376	391
Utility Services - Hazardous Waste	Utilities	10	10	11	12	13	14	15	16	17	18	19
Utility Services - Water	Utilities	276	287	299	310	323	336	349	363	378	393	408
Communication Services - Telephone	Comm	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Communication Services - Cellular Telephone	Comm	350	350	350	350	350	350	350	350	350	350	350
Communication Services - Internet	Comm	105	105	105	105	105	105	105	105	105	105	105
Parts/Repairs/Maintenance - Buildings/Facilities	Repairs	263	276	287	300	315	331	347	365	383	402	422
Parts/Repairs/Maintenance - Equipment	Repairs	2,000	2,000	2,080	2,174	2,282	2,396	2,516	2,642	2,774	2,913	3,058
Parts/Repairs/Maintenance - Utility Lines	Repairs	2,000	2,000	2,080	2,174	2,282	2,396	2,516	2,642	2,774	2,913	3,058
Parts/Repairs/Maintenance - Software	Repairs	3,313	3,313	3,445	3,581	3,781	3,970	4,168	4,377	4,595	4,825	5,066
Parts/Repairs/Maintenance - Other	Repairs	7,672	7,702	8,010	8,371	8,789	9,229	9,690	10,174	10,683	11,217	11,778
Equipment Rental	OPS	250	250	260	272	285	300	315	330	347	364	382
Education Expense	OPS	1,500	1,500	1,560	1,630	1,712	1,797	1,887	1,982	2,081	2,185	2,294
Printing	OPS	25	25	26	27	29	30	31	33	35	38	40
Travel	Inflation	70	70	72	75	77	80	83	85	88	90	93
Computer Replacement	Computer	3,125	3,125	3,128	3,128	3,128	3,128	3,128	3,128	3,128	3,128	3,128
Business and Auto Allowance	OPS	385	385	400	418	439	461	484	509	534	561	589
Dues/Subscriptions/Books	OPS	35	35	36	38	40	42	44	46	49	51	54
Other Services and Charges	OPS	144	152	158	165	173	182	191	201	211	221	232
Sewer Utility Lines	Constant	0	0	0	0	0	0	0	0	0	0	0
Total Collections		250,147	282,150	293,257	305,110	317,623	330,695	344,353	358,626	373,543	389,137	405,440
Sewer Plant Operations (472)												
Regular Salaries	Labor	253,351	262,905	273,421	284,358	295,732	307,562	319,864	332,659	345,965	359,804	374,196
Temporary Salaries	Labor	32,936	33,925	35,282	36,693	38,161	39,687	41,275	42,926	44,643	46,429	48,286
Overtime Pay	Labor	17,613	17,363	18,058	18,780	19,531	20,312	21,125	21,970	22,849	23,762	24,713
FICA Expense	FICA	22,513	23,287	24,218	25,187	26,195	27,242	28,332	29,465	30,644	31,870	33,145
Retirement Contribution	Retirement	14,903	15,415	16,032	16,673	17,340	18,033	18,755	19,505	20,285	21,096	21,940
Health Insurance	Benefits	35,480	39,009	41,545	44,453	47,584	50,954	54,456	58,268	62,347	66,712	71,381
Health Insurance - Dental	Benefits	2,708	2,841	3,026	3,226	3,407	3,566	3,744	3,936	4,141	4,359	4,590
Health Insurance - Vision	Benefits	653	653	695	744	796	852	912	975	1,044	1,117	1,195
Life, AD&D & LTD Insurance	Benefits	2,452	2,551	2,717	2,907	3,110	3,328	3,561	3,810	4,077	4,363	4,668
Employee Assistance Plan	Benefits	145	145	155	166	177	190	203	217	232	248	266
Workers Compensation	WorkComp	4,514	4,682	4,776	4,871	4,969	5,068	5,169	5,273	5,378	5,486	5,595
Office Supplies	OPS	2,500	2,750	2,860	2,989	3,138	3,295	3,460	3,633	3,814	4,005	4,205
Non-Capital Furniture/Equipment/Tools	OPS	20,000	20,000	20,800	21,736	22,823	23,964	25,162	26,420	27,741	29,128	30,585
Operating Supplies - Chemicals	OPS	64,000	65,000	67,600	70,642	74,177	77,883	81,777	85,866	90,159	94,667	99,400
Operating Supplies - Laboratory	OPS	16,000	17,000	17,680	18,476	19,399	20,369	21,388	22,457	23,580	24,759	25,997
Operating Supplies - Medical	OPS	250	300	312	326	342	359	377	396	416	437	459
Operating Supplies - Audio/Visual	OPS	0	0	0	0	0	0	0	0	0	0	0
Operating Supplies - Janitorial	OPS	1,300	1,400	1,456	1,522	1,598	1,677	1,761	1,849	1,942	2,039	2,141
Operating Supplies - Safety	OPS	1,900	2,000	2,080	2,174	2,282	2,396	2,516	2,642	2,774	2,913	3,058
Auto Expense - Parts & Repairs	Repairs	3,200	3,250	3,380	3,532	3,694	3,864	4,049	4,238	4,430	4,626	4,826
Auto Expense - Tires	OPS	300	600	624	652	685	719	755	793	832	874	918
Auto Expense - Gas & Oil	OPS	5,000	5,150	5,356	5,597	5,877	6,171	6,479	6,803	7,143	7,501	7,876
Uniforms and Clothing	Uniform	4,500	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524
Uniforms & Rental Supplies	OpSupplies	2,500	0	0	0	0	0	0	0	0	0	0
Miscellaneous Supplies	OpSupplies	1,120	1,160	1,206	1,261	1,324	1,390	1,459	1,532	1,609	1,689	1,774
Professional Services - Laboratory	ProServices	30,000	40,000	41,200	42,436	43,709	45,020	46,371	47,762	49,195	50,671	52,191
Professional Services - Moving	ProServices	420	433	446	463	473	487	499	517	532	548	565
Professional Services - Custodial	ProServices	2,000	2,150	2,215	2,281	2,349	2,420	2,492	2,567	2,644	2,724	2,805
Professional Services - Utility Rate Update	ProServices	1,500	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957
Professional Services - Biosolids Hauling	ProServices	85,000	102,000	105,060	108,212	111,458	114,802	118,246	121,793	125,447	129,211	133,087
Professional Services - SCADA	ProServices	7,000	7,750	7,983	8,222	8,469	8,723	8,984	9,254	9,532	9,817	10,112
Professional Services - Other	ProServices	12,000	12,500	12,875	13,261	13,659	14,069	14,491	14,926	15,373	15,835	16,310
Utility Services - Gas	Utilities	2,500	3,000	3,120	3,245	3,375	3,510	3,650	3,796	3,948	4,106	4,270
Utility Services - Electricity	Utilities	260,000	340,000	353,600	367,744	382,454	397,752	413,662	430,202	447,417	465,313	483,926
Utility Service - Trash Removal	Utilities	5,000	5,500	5,720	5,949	6,187	6,434	6,692	6,959	7,238	7,527	7,828
Utility Services - Eco Cycle	Utilities	0	0	0	0	0	0	0	0	0	0	0
Utility Services - Hazardous Waste	Utilities	800	800	832	865	900	936	973	1,012	1,053	1,095	1,139
Communication Services - Telephone	Comm	850	900	900	900	900	900	900	900	900	900	900
Communication Services - Cellular Telephone	Comm	1,200	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350
Communication Services - Pagers	Comm	0	0	0	0	0	0	0	0	0	0	0
Communications - T1	Comm	600	650	650	650	650	650	650	650	650	650	650
Postage	OPS	600	650	676	706	742	779	818	859	902	947	994
Parts/Repairs/Maintenance - Buildings/Facilities	Repairs	15,000	15,500	16,120	16,845	17,688	18,572	19,501	20,476	21,499	22,574	23,703
Parts/Repairs/Maintenance - Equipment	Repairs	58,000	60,000	62,400	65,208	68,468	71,892	75,486	79,261	83,224	87,385	91,754
Parts/Repairs/Maintenance - Grounds	Repairs	2,350	2,500	2,600	2,717	2,853	2,995	3,145	3,303	3,468	3,641	3,823
Parts/Repairs/Maintenance - HVAC	Repairs	6,510	6,550	6,812	7,119	7,474	7,848	8,241	8,653	9,085	9,540	10,017
Parts/Repairs/Maintenance - Software	Repairs	8,000	8,750	9,100	9,510	9,985	10,484	11,008	11,559	12,137	12,744	13,381
Equipment Rental	OPS	250	300	312	326	342	359	377	396	416	437	459
Rentals - Solar Power Equipment Lease	OPS	0	0	0	0	0	0	0	0	0	0	0
Rentals - Other	OPS	300	350	364	380	399	419	440	462	485	510	535
Education Expense	OPS	12,000	12,000	12,480	13,042	13,694	14,378	15,097	15,852	16,645	17,477	18,351
Advertising/Marketing	OPS	0	0	0	0	0	0	0	0	0	0	0
Printing	OPS	750	850	884	924	970	1,018	1,069	1,123	1,179	1,238	1,300
Dues/Subscriptions/Books	OPS	750	850	884	924	970	1,018	1,069	1,123	1,179	1,238	1,300
Dues/Subscriptions/Books	OPS	4,050	4,200	4,368	4,565	4,793	5,032	5,284	5,548	5,826		

**City of Louisville
2018 Financial Plan Update
Wastewater O&M Forecast**

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City of Louisville - Wastewater Utility												
Forecast O&M Expenses												
Cost Description	Escalation Category	Estimated 2017	Budget 2018	Forecast								
				2019	2020	2021	2022	2023	2024	2025	2026	2027
Pretreatment (473)												
Regular Salaries	Labor	80,311	81,973	85,252	88,662	92,208	95,897	99,733	103,722	107,871	112,186	116,673
Overtime Pay	Labor	480	480	499	519	540	562	584	607	632	657	683
FICA Expense	FICA	6,093	6,219	6,468	6,726	6,996	7,275	7,566	7,869	8,184	8,511	8,852
Retirement Contribution	Retirement	4,444	4,535	4,716	4,905	5,101	5,305	5,518	5,738	5,968	6,206	6,455
Health Insurance	Benefits	3,010	3,312	3,527	3,774	4,038	4,321	4,624	4,947	5,293	5,664	6,061
Health Insurance - Dental	Benefits	906	951	1,013	1,084	1,160	1,241	1,328	1,421	1,520	1,626	1,740
Health Insurance - Vision	Benefits	69	69	73	79	84	90	96	103	110	118	126
Life, AD&D & LTD Insurance	Benefits	799	815	868	929	994	1,063	1,138	1,217	1,303	1,394	1,491
Employee Assistance Plan	Benefits	28	28	29	32	34	36	39	41	44	47	51
Workers Compensation	WorkComp	1,384	1,410	1,438	1,467	1,496	1,526	1,557	1,588	1,620	1,652	1,685
Office Supplies	OPS	530	580	603	630	662	695	730	766	804	845	887
Non-Capital Furniture/Equipment/Tools	OPS	800	550	572	598	628	659	692	727	763	801	841
Operating Supplies - Laboratory	OPS	7,600	8,100	8,424	8,803	9,243	9,705	10,191	10,700	11,235	11,797	12,387
Operating Supplies - Safety	OPS	210	250	260	272	285	300	315	330	347	364	382
Auto Expense - Parts & Repairs	OPS	0	0	0	0	0	0	0	0	0	0	0
Uniforms and Clothing	Uniform	260	260	268	276	284	293	301	310	320	329	339
Professional Services - Legal	ProServices	0	0	0	0	0	0	0	0	0	0	0
Professional Services - Laboratory	ProServices	13,000	15,180	15,635	16,104	16,588	17,085	17,598	18,126	18,669	19,230	19,806
Communication Services - Cellular Telephone	Comm	360	360	360	360	360	360	360	360	360	360	360
Postage	OPS	0	0	0	0	0	0	0	0	0	0	0
Parts/Repairs/Maintenance - Equipment	Repairs	260	300	312	326	342	359	377	396	416	437	459
Education Expense	OPS	600	800	832	869	913	959	1,006	1,057	1,110	1,165	1,223
Printing	OPS	0	0	0	0	0	0	0	0	0	0	0
Travel	OPS	1,580	1,650	1,716	1,793	1,883	1,977	2,076	2,180	2,289	2,403	2,523
Dues/Subscriptions/Books	OPS	500	700	728	761	799	839	881	925	971	1,019	1,070
Other Services and Charges	OPS	500	600	624	652	685	719	755	793	832	874	918
Total Pretreatment		123,724	129,122	134,219	139,621	145,322	151,266	157,463	163,923	170,660	177,686	185,013
Total O&M		\$1,941,254	\$2,109,852	\$2,193,883	\$2,284,330	\$2,380,635	\$2,481,223	\$2,586,291	\$2,696,052	\$2,810,727	\$2,930,550	\$3,055,765

**City of Louisville
2018 Financial Plan Update
Stormwater Operating and Capital Fund Cash Flow**

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City of Louisville - Stormwater Utility Forecast Operating Fund Cash Flow											
Description	Estimated 2017	Budget 2018	Forecast								
			2019	2020	2021	2022	2023	2024	2025	2026	2027
Beginning Operating Fund Balance	\$1,165,980	\$523,919	\$348,918	\$37,792	\$157,621	\$40,348	\$208,074	\$403,591	\$594,362	\$496,233	\$492,033
Revenue											
Rate Revenue	737,150	779,266	842,153	892,724	937,717	977,176	1,018,296	1,033,583	1,035,650	1,037,722	1,039,797
Stormwater Permit Fees	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Grant Revenues	200,000	0	0	0	0	0	0	0	0	0	0
Assessment Fees	0	0	0	0	0	0	0	0	0	0	0
Delinquent Charges	900	900	900	900	900	900	900	900	900	900	900
Miscellaneous Revenue	0	0	0	0	0	0	0	0	0	0	0
Interest Earnings	7,000	7,000	2,417	1,221	1,237	1,553	3,823	6,237	6,816	6,177	5,996
Net Increase (Decrease) in Fair Value	0	0	0	0	0	0	0	0	0	0	0
Total Revenue	947,050	789,166	847,470	896,845	941,854	981,629	1,025,018	1,042,720	1,045,367	1,046,798	1,048,693
Revenue Requirements											
Operating Expenses	351,193	359,427	373,936	389,481	405,941	423,143	441,121	459,914	479,561	500,104	521,587
Debt Service - Existing	261,860	261,810	262,643	262,041	262,629	262,261	261,940	262,624	412,549	412,549	412,549
Debt Service - Proposed	0	0	0	0	0	0	0	0	0	0	0
Transfer Out to Capital Fund	976,059	342,929	522,018	125,494	390,558	128,499	126,440	129,413	251,385	138,345	139,305
Transfer Out to Debt Service Reserve											
Total Revenue Requirement	1,589,111	964,166	1,158,596	777,016	1,059,127	813,903	829,501	851,950	1,143,495	1,050,998	1,073,441
Annual Surplus/(Deficit)	(642,061)	(175,000)	(311,126)	119,829	(117,273)	167,726	195,518	190,770	(98,129)	(4,200)	(24,748)
Ending Operating Fund Balance	523,919	348,918	37,792	157,621	40,348	208,074	403,591	594,362	496,233	492,033	467,285
Target Operating Reserve	115,461	118,168	122,938	128,048	133,460	139,115	145,026	151,204	157,664	164,418	171,481
Ending Balance Excess / (Shortfall)	\$408,458	\$230,751	(\$85,146)	\$29,572	(\$93,112)	\$68,958	\$258,565	\$443,157	\$338,569	\$327,615	\$295,804
DSCR without Tap Fees (Target =1.3)	1.51	1.64	1.80	1.94	2.04	2.13	2.23	2.22	1.37	1.33	1.28
Projected Revenue Increase	0.0%	7.0%	7.0%	4.0%	4.0%	4.0%	4.0%	0.0%	0.0%	0.0%	0.0%

City of Louisville - Stormwater Utility Forecast Capital Fund Cash Flow											
Description	Estimated 2017	Budget 2018	Forecast								
			2019	2020	2021	2022	2023	2024	2025	2026	2027
Beginning Fund Balance	\$0	\$14,511	\$33,742	\$40,222	\$50,282	\$52,482	\$59,682	\$61,882	\$64,082	\$66,282	\$70,482
Sources of Funds											
Tap Fee Revenue	0	0	0	0	0	0	0	0	0	0	0
Transfer In From Operating Fund	976,059	342,929	522,018	125,494	390,558	128,499	126,440	129,413	251,385	138,345	139,305
Bond/Loan Proceeds	0	0	0	0	0	0	0	0	0	0	0
Capital Fund Interest Earnings	0	302	462	566	642	701	760	787	815	855	895
Total Sources of Funds	976,059	343,231	522,480	126,060	391,200	129,200	127,200	130,200	252,200	139,200	140,200
Uses of Funds											
CIP	961,548	324,000	516,000	116,000	389,000	122,000	125,000	128,000	250,000	135,000	138,000
Total Uses of Funds	961,548	324,000	516,000	116,000	389,000	122,000	125,000	128,000	250,000	135,000	138,000
Annual Surplus/(Deficit)	14,511	19,231	6,480	10,060	2,200	7,200	2,200	2,200	2,200	4,200	2,200
Ending Fund Balance	14,511	33,742	40,222	50,282	52,482	59,682	61,882	64,082	66,282	70,482	72,682
Target Fund Balance (2% of Fixed Assets)	14,511	33,742	40,222	50,282	52,482	59,682	61,882	64,082	66,282	70,482	72,682
Ending Balance Excess/(Shortfall)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Projected Tap Fee Increase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**City of Louisville
2018 Financial Plan Update
Stormwater CIP Forecast**

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City of Louisville - Stormwater Utility Forecast CIP without inflation												
Project	Percent Growth-Related	Estimated 2017	Budget 2018	Forecast								
				2019	2020	2021	2022	2023	2024	2025	2026	2027
City-Wide Storm Sewer Outfall Improvements Drainageway 7-1		\$320,000										
Storm Sewer Detention Pond Maintenance		112,750	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000	\$110,000
BNSF RR Underpass/N Drainage (63%)		94,500	\$189,000	\$315,000								
Core Area Utility (80%)												
CCS Drainage		250,000										
Cottonwood Park Floodplain						\$250,000						
South Street Underpass (7%)		92,638										
96th and Dillon (DWY G)										\$100,000		
Goodhue Ditch Storm Water Diversion		16,000		\$78,000								
Vehicle and Equipment Replacement		46,784										
Lucy Asset Management Software (25%)		28,876	25,000									
Updated Total CIP Before Inflation Adjustment		\$961,548	\$324,000	\$503,000	\$110,000	\$360,000	\$110,000	\$110,000	\$110,000	\$210,000	\$110,000	\$110,000

City of Louisville - Stormwater Utility Forecast CIP with Inflation												
Project	Percent Growth-Related	Estimated 2017	Budget 2018	Forecast								
				2019	2020	2021	2022	2023	2024	2025	2026	2027
City-Wide Storm Sewer Outfall Improvements	\$0	\$320,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Drainageway 7-1	\$0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Storm Sewer Detention Pond Maintenance	\$0	112,750	\$110,000	\$113,000	\$116,000	\$119,000	\$122,000	\$125,000	\$128,000	\$131,000	\$135,000	\$138,000
BNSF RR Underpass/N Drainage (63%)	\$0	94,500	\$189,000	\$323,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Core Area Utility (80%)	\$0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CCS Drainage	\$0	250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cottonwood Park Floodplain	\$0	0	\$0	\$0	\$0	\$270,000	\$0	\$0	\$0	\$0	\$0	\$0
South Street Underpass (7%)	\$0	92,638	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
96th and Dillon (DWY G)	\$0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$119,000	\$0	\$0
Goodhue Ditch Storm Water Diversion	\$0	16,000	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Vehicle and Equipment Replacement	\$0	46,784	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lucy Asset Management Software (25%)	\$0	28,876	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total CIP After Inflation Adjustment		\$961,548	\$324,000	\$516,000	\$116,000	\$389,000	\$122,000	\$125,000	\$128,000	\$250,000	\$135,000	\$138,000
Total Inflation Adjustment		\$0	\$0	\$13,000	\$6,000	\$29,000	\$12,000	\$15,000	\$18,000	\$40,000	\$25,000	\$28,000

City of Louisville
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Stormwater O&M Forecast

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City of Louisville - Stormwater Utility												
Forecast O&M Expenses												
Cost Description	Escalation Category	Estimated 2017	Budget 2018	Forecast								
				2019	2020	2021	2022	2023	2024	2025	2026	2027
	1	2	3	4	5	6	7	8	9	10	11	12
Total Storm Engineering (424)												
Regular Salaries	Labor	25,417	25,723	26,752	27,823	28,935	30,093	31,297	32,548	33,850	35,204	36,613
Temporary Salaries	Labor	0	0	0	0	0	0	0	0	0	0	0
Overtime Pay	Labor	0	0	0	0	0	0	0	0	0	0	0
FICA Expense	FICA	1,839	1,861	1,936	2,013	2,094	2,177	2,264	2,355	2,449	2,547	2,649
Retirement Contribution	Retirement	1,398	1,415	1,471	1,530	1,591	1,655	1,721	1,790	1,862	1,936	2,014
Health Insurance	Benefits	2,113	2,353	2,506	2,681	2,869	3,070	3,285	3,514	3,760	4,024	4,305
Health Insurance - Dental	Benefits	154	164	175	187	200	214	229	245	262	281	301
Health Insurance - Vision	Benefits	44	45	47	51	54	58	62	67	71	76	82
Life, AD&D & LTD Insurance	Benefits	248	250	266	285	305	326	349	373	400	428	457
Employee Assistance Plan	Benefits	8	8	9	9	10	10	11	12	13	14	15
Workers Compensation	WorkComp	213	216	220	225	229	234	238	243	248	253	258
Unemployment Compensation	Labor	0	0	0	0	0	0	0	0	0	0	0
Office Supplies	OPS	420	440	458	478	502	527	554	581	610	641	673
Computer Supplies	OPS	20	20	21	22	23	24	25	26	28	29	31
Non-Capital Computer Software	OPS	100	100	104	109	114	120	126	132	139	146	153
Operation Supplies - Safety	OPS	60	60	62	65	68	72	75	79	83	87	92
Non-Capital Furniture/Equipment/Tools	OPS	940	980	1,019	1,065	1,118	1,174	1,233	1,295	1,359	1,427	1,499
Miscellaneous Supplies	OPS	40	40	42	43	46	48	50	53	55	58	61
Uniforms and Clothing	Uniform	0	0	0	0	0	0	0	0	0	0	0
Auto Expense-Parts & Repairs	OPS	220	240	250	261	274	288	302	317	333	350	367
Auto Expense-Tires	OPS	0	0	0	0	0	0	0	0	0	0	0
Gas & Oil	OPS	420	440	458	478	502	527	554	581	610	641	673
Printing	OPS	320	340	354	370	388	407	428	449	472	495	520
Travel	OPS	20	20	21	22	23	24	25	26	28	29	31
Business and Auto Allowance	OPS	0	0	0	0	0	0	0	0	0	0	0
Dues/Subscriptions/Books	OPS	260	280	291	304	320	335	352	370	388	408	428
Communication Svcs-Cell Phone	OPS	0	0	0	0	0	0	0	0	0	0	0
Prof Serv-Consulting	OPS	25,220	25,240	26,250	27,431	28,802	30,242	31,755	33,342	35,009	36,760	38,598
Parts/Repairs/Maint-Copiers	Repairs	240	260	270	283	297	312	327	343	361	379	398
Parts/Repairs/Maint-Software	Repairs	1,160	1,220	1,269	1,326	1,392	1,462	1,535	1,612	1,692	1,777	1,866
Total Wastewater Engineering		60,874	61,715	64,250	67,060	70,156	73,400	76,797	80,356	84,084	87,989	92,080

August 10, 2017

Cory Peterson
Water Resources Engineer
City of Louisville
749 Main Street
Louisville, Colorado 80027

Re: Harper Reservoir/Open Space

Dear Cory:

You requested a review of the water storage rights decreed to Harper Lake (sometimes referred to as Harper Reservoir), particularly the impact of the conditional water storage rights for Harper Lake, a portion of which have not been made “absolute,” and remain conditional. The City may seek to rezone the property on which Harper is located from residential to “open space;” this letter reviews the possible impacts of that re-zoning.

OVERVIEW

I have reviewed the various decrees for Harper, and the relevant Louisville City Code provisions regarding open space, including the use and management of open space land.

With respect to the currently existing Harper Lake, no physical expansion or enlargement of the current configuration would be required to store the remaining conditional water storage rights. The conditional rights were claimed, in the early 1980’s, to fill the existing space with a more junior priority; so far Harper has filled from the senior water storage decree, a portion of the more junior water rights, and by using water from senior ditch (direct flow) water rights, the return flows from which allow water to continue to be stored in Harper.

The primary function of Harper is water storage management for Louisville’s municipal water system. I believe it is important that any re-zoning recognize that primary function. The open space provisions provide for different classifications (Open Space-Preserve Land, Open Space-Protected Land, and Open Space-Other Land), with different levels of “protection.” Although there is language in the Article on open space recognizing use of open space land for City functions, it may be beneficial to incorporate language in the resolution so that there are no future issues with the use as a reservoir.

HARPER LAKE

The original water storage right for Harper Reservoir was adjudicated in Boulder County District Court Civil Action No. 4488 on July 7, 1902. The Reservoir has an appropriation date of July 13, 1889 for 62.29 acre-feet, with a right to fill and refill at a rate of 20 cubic feet per second (cfs).

In the late 1970's and early 1980's, Harper was enlarged to a capacity of 715 acre-feet. A water court decree (Case No. 82CW376, Water Division No. 1, entered January 14, 1988) was obtained which allowed certain alternate points of diversion and storage, and allowed return flows from other senior water rights to be used to replace obligations that Harper had to make return flows, allowing Harper to remain full. Finally, a conditional decree was obtained in what Louisville refers to as the "Harper Reservoir Enlargement" in Case No. 82CW467, Water Division No. 1, entered November 17, 1995, for 652.71 acre-feet (the difference between the new 715 acre-foot capacity and the original decreed amount of 62.29 acre-feet). This conditional water storage right has an appropriation date of December 14, 1982.

Because all 652.71 acre-feet in the conditional water storage right has not yet been diverted into Harper, Louisville is obligated to file a water court application every six years to demonstrate that it is making reasonable progress towards "perfecting" the water right (making it absolute rather than conditional). A large portion of the 652.71 acre-feet is still conditional, although Louisville is fairly aggressive in diverting water into Harper.

It is important to emphasize that the "enlargement" does not require any future physical modifications to the Harper Reservoir structure—the full capacity of 715 acre-feet exists today.

OPEN SPACE

I have reviewed Article 15 of the City Code, regarding Open Space. Although unlikely, there are some sections in Article 15 that may conflict with the use of the land underlying and surrounding Harper. Initially, Section 15-3(d) provides that once land is placed in the open space zone district, it cannot be rezoned or placed into any other zone without the approval of the registered electors. I don't know that it would ever be necessary to rezone this land, but staff should be aware of the difficulty in reversing the zoning.

In at least two of the classifications, the Code encourages, and in some instances requires, that "ecological importance" be given preference over "human use." There are also limitations on methods of wildlife control and management, and on the use of pesticides, herbicides and other similar chemicals.

These are likely mitigated by Section 15-5, pursuant to which "Nothing in this article shall be construed to: (a) Affect or limit the safe and efficient operation, construction and maintenance of the City's water, sewer, drainage, and flood control systems and infrastructure; except that the

City shall make reasonable efforts to mitigate the impact of such operation, construction, and maintenance on open space.”

CONCLUSION

There are no water decrees/conditional water rights that would be adversely impacted by a rezoning of the land underlying and surrounding Harper Lake. However, I believe it would be appropriate to recognize the use of Harper Lake in Louisville’s water system in any rezoning.

Please let me know if I can provide additional information.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Alan G. Hill", with a stylized flourish at the end.

Alan G. Hill

AGH:cmc